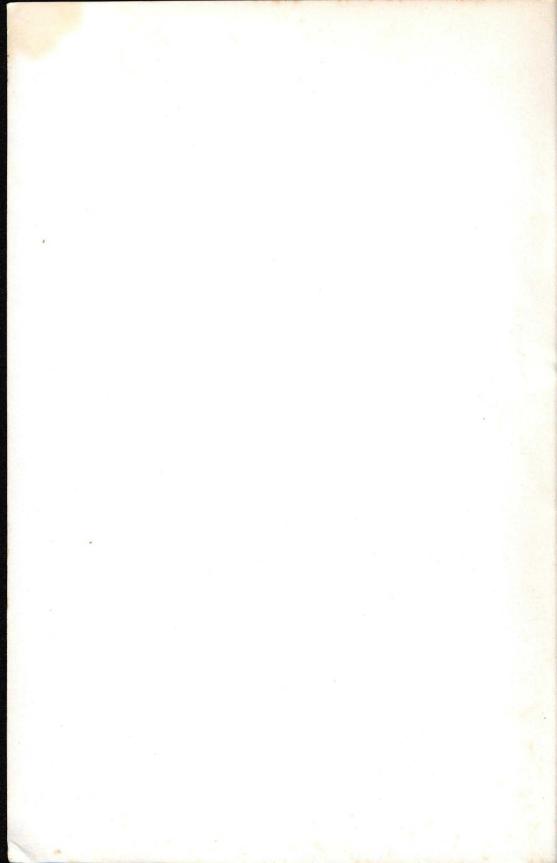


MEASURING TAPES RULES

LUEKIN LUEKIN LUEKIN LUEKIN LUEKIN LUEKIN

CATALOG NUMBER TEN



Measuring Tapes and Rules of Every Description

Catalog Number Ten

MANUFACTURED BY

THE LUFKIN RULE CO.

Main Office and Factory

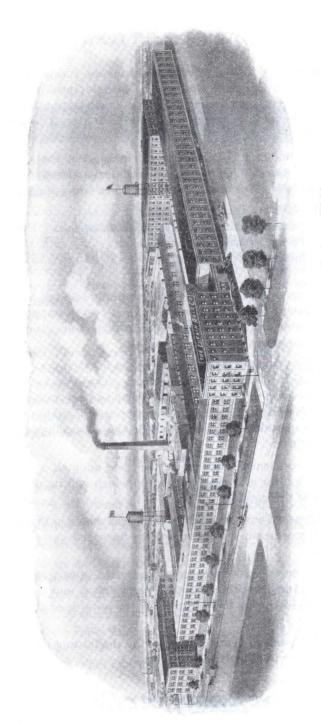
SAGINAW, MICHIGAN, U.S. A.

Cable Addresses: LUFKIN—SAGINAW LUFKIN—NEW YORK

NEW YORK OFFICE AND WAREHOUSE 106-110 Lafayette Street LONDON OFFICE AND WAREHOUSE

118-122 Holborn, E. C.

Canadian Factory, WINDSOR, ONTARIO



Factories and Main Office of The Lufkin Rule Company, Saginaw, Michigan

INTRODUCTORY

HIS catalog places before you our very complete line of Measuring Tapes, Rules, etc., a development of over a quarter century of experience and investigation, and as a result, we are today the largest manufacturers of Measuring Devices in the world.

In the manufacture of these goods nothing but the very best of materials is used. They are made by skilled artisans and every article is carefully inspected and tested before being shipped.

Our Measuring Tapes embody all the latest improvements in markings and case construction. The *Instantaneous* Readings, of which we are the original designers, and for which patent is pending, are now applied to Metallic Tapes in addition to all Steel Tapes.

Our Boxwood Rules are made from carefully selected boxwood, which has been allowed to season for at least two years; great care is given to their finish and markings, and we guarantee them to be superior to any other line on the market.

Our Spring Joint Rules are made of the finest grade of maple, nicely enameled in either yellow or white. They can be supplied with the concealed or rivet type of joints, and are made with a variety of markings for both domestic and foreign use. All metal trimmings are brass plated, and the figures and lines show up clear and distinct.

In order to identify our goods, we have adopted a standard color and design for all boxes and labels, which will be recognized in the cover of this catalog.

Electrotypes of our goods, the same size as shown in this catalog or of a size considerably smaller, will be furnished our customers free of charge.

All trade marks and trade names indicated in this catalog are duly registered in the United States Patent Office, and we caution all persons against using them except for the purpose of identifying our goods.

LUFKIN goods are carried in stock by the leading jobbers and hardware dealers in all parts of the world.

THE UFKIN PULE CO.

Instantaneous

READINGS

$7^{\text{\tiny MPKM}}97897997109711$

Instantaneous Readings is the name given by us to identify our system of marking Steel and Metallic Tapes. We are the originators of this system of marking, and patent for same is pending. The above illustration will convey just what this system is; but briefly described, it consists of repeating the foot marks at each inch in small, yet easily distinguishable figures. Thus the total reading is brought directly before the eye, eliminating all chance for a possible error, to say nothing of the saving of valuable time.

NUBIAN FINISH

Nubian Finish designates the style of finish supplied on all our etched Steel Tapes. The ribbon is given a dead black finish and the graduations and figures appear in the bright natural finish, producing a marked contrast, which greatly increases the legibility of the tape. Nubian Finish wears well, is rust-resisting and improves the appearance of the tape.

LETTER SUFFIXES

In connection with the numbering of certain tapes, we use letter suffixes, the meaning of which are indicated below:

- D —Indicates tapes marked one side only in feet and 10ths.
- M —Indicates tapes marked one side only in the Metric System.
- ME—Indicates tapes marked with Metric Measurements on front, English Measurements on back.
- EM—Indicates tapes marked with English Measurements on front, Metric Measurements on back.
- L —Indicates tapes marked in 12ths on front, Links and Poles on back.
- DL —Indicates tapes marked in 10ths on front, Links and Poles on back.
- P —Indicates tapes marked in Diameter Measurements.
- C —Indicates tapes marked in Consecutive Inches.

LUFKIN STEEL TAPES

Standard of Measurements

Our steel tapes are so carefully graduated by Standards supplied us by the United States Government that they can be used for testing the accuracy of other tapes.

Tension:

Lufkin steel tapes are made under a tension of 10 pounds for tapes up to 100 feet in length and 20 pounds if longer. They are accurate when supported full length at this tension.

Temperature:

Steel tapes graduated in customary English units (feet, inches, etc.) are standard at a temperature of 62° Fahrenheit. The National Bureau of Standards recommend tapes graduated in the Metric System be made Standard at 20° Centigrade, this being the normal temperature under which they are used. We are prepared to make them at 20° Centigrade if so desired, but unless otherwise specified, we will make them accurate at 0° Centigrade, which is the customary Standard for Countries that have adopted the Metric System.

CERTIFICATE OF COMPARISON OF THE NATIONAL BUREAU OF STANDARDS AT WASHINGTON, D. C.

We can furnish a certificate of comparison of the National Bureau of Standards for any Lufkin Steel Tape the graduations of which are marked directly on the steel and the zero of the graduations is represented by a line marked on the tape. The fees of the Bureau of Standards for comparisons are given below, to this must be added the transportation charges to and from Washington, D. C.

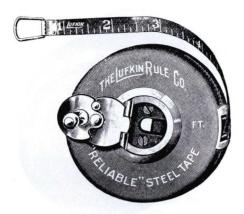
	For	tapes not sent on a reel there will be an additional charge for each 100-foot or 50-meter length or fraction thereof of		25
(H)	For	determining the tension to the nearest 0.5 pound or 0.25 kilogram at which the tape is most nearly correct at the standard temperature, for each 100-foot or 50-meter interval		50
(G)	For	determination of length at an additional tension, for each 100-foot or 50-meter interval		25
(F)	For	each sub-division compared		10
	For	each additional 100 feet or 50 meters.	-	00
(\mathbb{D})	For	comparing total length both supported throughout and at intervals for length of 100 feet or 50 meters.	1	25
(A)		total length, not greater than 100 feet or 50 meters, either supported throughout or at intervals	\$0	75 50

The Bureau of Standards certificate states the temperature at which the comparison was made, the method of support, the tension used in making comparison, and the length corrected for the standard temperature. The number of each certificate is also etched on the tape.

"RELIABLE" STEEL MEASURING TAPES

(Trade Mark Registered)

Instantaneous Readings-Nubian Finish



Patented Dec. 17, 1907

Metal lined hard leather cases, double folding flush handle, opened by pressing on opposite side. Handle has extension finger hold which affords a firm grip when winding in tape. Nickel plated trimmings. Measurements guaranteed accurate.

We guarantee the "Reliable" the finest and best steel tape in the world.

With Three-eighth Inch Tapes

	VV 1	m Imee	-eignu	LINCH	Tapes								
	Marked Feet, Inches and 8ths, Links on Back												
No. Length, feet, Wt. each, oz., Each,	200 25 9 \$4 50	201 33 10	203 50 13 7 20	204 66 16 9 20	205 75 19 10 40	206 100 22 12 80	207 150 30 18 50	208 200 39 24 00					
Marked Feet, 10ths and 100ths, Links on Back													
No. 200 D 201 D 203 D 204 D 205 D 206 D 207 D 208 D													
Length, feet,	25	33	50	66	75	100	150	200					
Wt. each, oz.,	9	10	13	16	19	22	30	39					
Each,	\$4 50	5 20	7 20	9 20	10 40	12 80	18 50	24 00					
Marked Metric One Side Only													
No.	201 M	20	3 M	20	04 M	208	5 M	206 M					
Length, meters,	10	-	15		20	2	25	30					
Wt. each, oz.,	10		13		16	1	19	22					
Each,	\$5 20	7	7 20	9	9 20	11	10	12 80					
With Double (Fraduations	: Metric	and En	glish (I	ME), En	glish and	Metric (EM)					
No.	200 ME	201 ME	203 M		ME -		205 ME	206 ME					
No.	200 EM	201 EM	203 EN			05 EM -		206 EM					
Length, meters,	71/2	10	15		20	22	25	30					
Length, feet,	25	33	50		56	75	82	100					
Wt. each, oz.,	9	10	13		16	19	19	22					
Each,	\$4 75	5 50	7 70	20		11 15	11 90	13 80					
Note Tapes are	dunted with	any two me	asurement	s listed a	above, wi	ll be suppli	ed at price	of corres-					

Note—Tapes graduated with any two measurements listed above, will be supplied at price of corponding tapes marked Metric and English.

For graduations that can be supplied, see page 24.

For "Reliable" tapes marked feet, inches and 16ths, an additional charge of 5% will be made.

For "Reliable" tapes without links, deduct one cent per foot from list price.

"RELIABLE" STEEL MEASURING TAPES (EXTRA WIDE)

(Trade Mark Registered)

Instantaneous Readings-Nubian Finish



Patented Dec. 17, 1907

With double folding flush handle, opened by pressing on opposite side. Hard leather cases. Nickel plated trimmings. Marked on back with links and poles. Measurements

guaranteed accura		mmigs. Iv	iaikeu c	n back	WILL IIII	AS and	poles.	Measur	cincincs			
We guara	intee the	"Reliable	" the fin	est and	best ste	eel tape	in the v	vorld.				
With One-half Inch Tapes												
12ths of feet, 10ths of feet, Length, feet,	No. No.	300 300 D 25 11	301 301 D	5	3 3 D 0 6	304 304 D 66 20	30 30 7 2	5 D	306 D 306 D 100 29			
Wt. each, oz., Each,		\$5 10	5 85		10	10 35	11		14 40			
		With F	ive-eigl	hth Inc	h Tape	es						
12ths of feet, 10ths of feet, Length, feet, Each,	No. No.	341 341 D 33 \$6 60)	343 343 D 50 9 10	100	14 D	345 345 75 13 2	D	346 D 100 16 20			
With Three-fourth Inch Tapes												
12ths of feet, 10ths of feet, Length, feet, Each,	No. No.	351 351 D 33 \$7 40)	353 D 50 0 20	-	54 D 56	355 355 75 14 8	D	356 356 D 100 18 20			
	"RE	LIABLE"	TAPE	s wit	TUOH	CAS	ES					
			d Link									
Length, feet,		25	33	50	66	75	100	150	200			
3/8 inch wide, eac 1/2 " " " 5/8 " " " " 3/4 " " "		\$2 90 3 30	3 60 4 10 4 60	5 40 6 10 6 90	7 20 8 10 9 10	8 00 9 00 10 10	10 20 11 50 12 90	15 30	20 0 0			
34 " " "			5 20	7 80	10 20	11 40	14 50					
Extra for marking tapes, Meters on back, each 25 33 50 66 75 1 00 1 50 2 00 For "Reliable" Tapes without links, deduct one cent per foot from list price.												
Packed one in a	box			•								

"RELIABLE JUNIOR" STEEL MEASURING TAPES

(Trade Mark Registered)

Instantaneous Readings-Nubian Finish



Patented Dec. 17, 1907

Metal lined hard leather cases. Double folding flush handle, opened by pressingon opposite side. Nickel plated trimmings. Handle has extension finger hold which affords a firm grip when winding in tape. Measurements guaranteed accurate.

With One-quarter Inch Tapes

	With O	ne-quarter	Inch Iu	Pes		
	Marked Feet, I	nches and 1	6ths, One	Side Only	7	
No. Length, feet, Wt. each, oz., Each,	100 25 4 \$3 75	101 33 5 4 00	103 50 6 4 60	104 66 7 5 25	105 75 8 5 75	106 100 11 7 00
	Marked Feet,	L0ths and 10	0ths, One	Side Only	y	
No. Length, feet, Wt. each, oz., Each,	100 D 25 4 \$3 75	101 D 33 5 4 00	103 D 50 6 4 60	104 D 66 7 5 25	105 D 75 8 5 75	106 D 100 11 7 00
	Marke	d Metric On	ne Side Or	nly		
No. Length, meters, Wt. each, oz., Each,	101 M 10 5 \$4 00	103 M 15 6 4 60	104 2	M M 7 25	105 M 25 8 6 40	106 M 30 11 7 00
Double Gre	duations: Metri	ic and Englis	sh (ME), I	English an	d Metric (El	M()

Double Graduations: 106ME 103 ME 105 ME 101 ME 104 ME 100 ME No. 105 EM 106 EM 104 EM 100 EM 101 EM 103 EM No. 71/2 20 22 25 30 15 10 Length, meters, 75 82 100 50 66 33 Length, feet, 11 5 6 Wt. each, oz., 9 00 7 25 5 60 6 60 \$4 25 4 65 Each.

Note—Tapes graduated with any two measurements listed above, will be supplied at price of corresponding tapes marked Metric and English.

For prices of tapes only, see page 25.

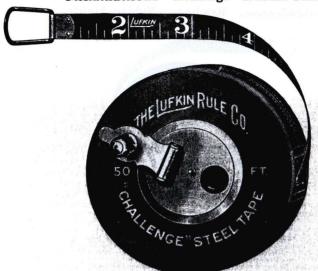
For graduations that can be supplied, see page 24.

A convenient vest pocket steel tape, being an exact counterpart of our well known "Reliable", and not much over one-half its size and weight. It is a beautiful piece of workmanship, and although small and light, is constructed in such a durable manner, and the steel also of sufficient weight, that with proper care, it will wear as long as an ordinary steel tape. wear as long as an ordinary steel tape.
Packed one in a box.

"CHALLENGE" STEEL MEASURING TAPES

(Trade Mark Registered)

Instantaneous Readings-Nubian Finish



Metal lined hard leather cases, nickel plated trimmings, folding flush handle, opened by pressing pin on opposite side. Measurements guaranteed accurate.

With Three-eighth Inch Tapes

	Marked	Feet, Inches	and 8ths, O	ne Side Only	y	
No. Length, feet, Wt. each, oz., Each,	260 25 7 \$3 25	261 33 8 3 50	263 50 12 4 00	264 66 14 5 00	265 75 17 5 25	266 100 21 6 75
	Marked	Feet, 10ths	and 100ths,	One Side Or	aly	
No. Length, feet, Wt. each, oz., Each,	260 D 25 7 \$3 25	261 D 33 8 3 50	263 D 50 12 4 00	264 D 66 14 5 00	265 D 75 17 5 25	266 D 100 21 6 75
	M	arked Metri	c One Side	Only		
No. Length, meters, Wt. each, oz., Each,	261 M 10 8 \$3 50	263 M 15 12 4 00	264 M 20 14 5 00	265 M 25 18 6 00	266 M 30 21 6 75	267 M 50 33 12 00
Double Gra	duations: 1	Metric and E	nglish (ME)	, English and	l Metric (El	(I)

Note—Tapes graduated with any two measurements listed above, will be supplied at price of corresponding tapes marked Metric and English.

For prices of tapes only, see page 25.

For graduations that can be supplied, see page 24.

For "Challenge" tapes marked feet, inches and 16ths, an additional charge of 5% will be made.

20

66

14

6 30

22

75

17

6 75

265 ME 266 ME

82

18

7 65

266 EM

30

100

21

8 75

267 ME

50

164

33

15 30

\$3 75

No.

No.

Each,

Length, meters,

Length, feet,

Wt. each, oz.,

Packed one in a box.

260 ME 261 ME 263 ME 264 ME

10

33

4 15

8

260 EM 261 EM 263 EM 264 EM 265 EM

15

50

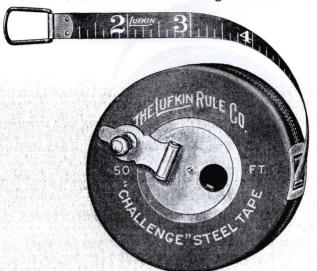
12

5 00

"CHALLENGE" STEEL MEASURING TAPES (EXTRA WIDE)

(Trade Mark Registered)

Instantaneous Readings-Nubian Finish



Metal lined hard leather cases, nickel plated trimmings, folding flush handle, opened by pressing pin on opposite side. Measurements guaranteed accurate.

With One-half Inch Tanes

	Y	vith O	ne-nau.	inch la	pes			
	Marke	d Feet,	Inches a	nd 8ths, (One Side	Only		
No. Length, feet, Wt. each, oz., Each,	360 25 8 \$3 75		361 33 9 4 00	363 50 14 4 50	36 66 18 5 5	3	365 75 20 6 00	366 100 26 7 50
CAN SERVICE STATE	Marke	d Feet,	10ths and	1 100ths,	One Side	Only		
No. Length, feet, Wt. each, oz Each,	360 D 25 8 \$3 75		61 D 33 9 4 00	363 D 50 14 4 50	364 66 18 5	6 3	75 20 6 00	366 D 100 26 7 50
		Marke	d Metric	One Sid	e Only			
No. Length, meters, Wt. each, oz., Each,	361 M 10 8 \$4 00		15 14 4 50	364 M 20 18 5 50	2. 2 6	5 1 75	366 M 30 26 7 50	367 M 50 43 13 00
Double G	raduations			The state of the s	E), Englis			
No. No.	360 ME 3 360 EM 3					365 ME	366 ME 366 EM	367 ME
Length, meters, Length, feet, Wt. each, oz., Each,	7½ 25 8 \$4 25	10 33 9 4 65	15 50 14 5 50	20 66 18 6 80	22 75 20 7 50	25 82 21 8 40	30 100 26 9 50	50 164 43 16 30
Note—Tapes or	Company of the second of the second	and the second		ts listed ab	ove, will be	supplied at	price of con	responding

Note—Tapes graduated with any two measurements listed above, will be supplied at price of correstapes marked Metric and English.

For prices of tapes only, see page 25.

For graduations that can be supplied, see page 24.

For "Challenge" tapes marked feet, inches and 16ths, an additional charge of 5% will be made.

Packed one in a box.

Each,

Length, meters,

Length, feet,

Wt. each, oz.,

"CHALLENGE JUNIOR" STEEL MEASURING TAPES

(Trade Mark Registered)

Instantaneous Readings-Nubian Finish



Metal lined hard leather cases, nickel plated trimmings, folding flush handle, opened by pressing pin on opposite side. Measurements guaranteed accurate.

With One-quarter Inch Tapes

	Marked Fe	et, Inches ar	nd 16ths, On	e Side Only						
No.	1260	1261	1263	1264	1265	1266				
Length, feet,	25	33	50	66	75	100				
Wt. each, oz.,	4	5	6	7	8	11				
Each,	\$3 00	3 25	3 50	4 00	4 50	5 75				
Marked Feet, 10ths and 100ths, One Side Only										
No.	1260 D	1261 D	1263 D	1264 D	1265 D	1266 D				
Length, feet,	25	33	50	66	75	100				
Wt. each, oz.,	4	5	6	7	8	11				
Each,	\$3 00	3 25	3 50	4 00	4 50	5 75				
	M	arked Metric	One Side C	nly						
No.	1261 M	1263 M	1264 I	M 120	65 M	1266 M				
Length, meters,	10	15	20		25	30				
Wt. each, oz.,	5	6	7		8	11				
Each,	\$3 25	3 50	4 00	4	90	5 75				
Double G	raduations: 1	letric and Er	nglish (ME),	English and	Metric (El	M)				
No.	1260 ME 1	261 ME 1263	3 ME 1264 N	ME	- 1265 ME	1266 ME				
No.	1260 EM 1	261 EM 1263	3 EM 1264 I	EM 1265 EM	I	1266 EM				
	71/	4.0	4	0.0	0 =	20				

4 50

15

50

6

20

66

5 30

30

100

11

7 75

25

82

22

75

6 00

8

71/2

25

\$3 50

10

33

5

3 90

Note—Tapes graduated with any two measurements listed above, will be supplied at price of corresponding tapes marked Metric and English.

For prices of tapes only, see page 25.

For graduations that can be supplied, see page 24.

The "Challenge Junior" is about one-half the size and weight of our regular "Challenge" steel tape It is light and compact, yet constructed in a durable manner, and with proper care, will last as long as any ordinary steel tape. In workmanship these tapes are of unusual merit, and can be safely relied upon to give satisfaction in every particular.

Packed one in a box.

TREE TAPE

For Forester's Use

Smatantaneous Readings—Nubian Finish



Gives at a Direct Reading the Diameter of the Tree as Well as Its Circumference

Three-eighth inch wide, 50 foot steel tape marked one side feet, 10ths and 100ths, other side diameter measurements in terms of 10ths and 100ths of feet. Equipped for fastening to tree with end spike or peg, which folds down for convenience in carrying. Put up in Challenge pattern metal lined hard leather case, with nickel plated trimmings, and folding flush handle opened by pressing pin on opposite side. Each, \$7 00

Note-For Biltmore or Forest Cruiser Sticks, see page 98.

Steel Tapes with Diameter Measurements With Three-Eighth Inch Tapes

These tapes are marked on one side in feet, inches and 8ths, other side diameter measurements in feet, enabling one, by measuring the circumference, to arrive at the exact diameter as fine as 64ths of inches. Put up in Challenge pattern metal lined hard leather cases, with nickel plated trimmings and folding flush handle opened by pressing pin on opposite side.

No. **261** P—33 feet, Wt. each, 8 oz. Each, \$4 15 No. **263** P—50 feet, Wt. each, 12 oz. Each, 5 00

Packed one in a box.

Steel Tapes with Consecutive Inches With Three-Eighth Inch Tapes

These tapes are marked one side in feet, inches and 8ths, other side in consecutive inches and 8ths, put up in Challenge pattern metal lined hard leather cases with nickel plated trimmings and folding flush handle opened by pressing pin on opposite side.

No. 260 C—25 feet, (300 inches), Wt. each, 7 oz. Each, \$3 75 No. 263 C—50 feet, (600 inches), Wt. each, 12 oz. Each, 5 00 Packed one in a box.

PHOSPHOR BRONZE TAPES

These tapes are particularly adapted to classes of work where a steel tape is affected by gases, salt water, acids, etc., and they are guaranteed not to rust. We can supply them either 3/8 or 1/2 inch wide, put up in leather cases or metal frames. Prices quoted upon application.

No.

No.

Length, meters,

"RIVAL" STEEL MEASURING TAPES

(Trade Mark Registered)

Instantaneous Readings—Nubian Finish



Nickel plated steel cases, folding flush handle, opened by pressing pin on opposite side. Cases have knurled edges, which afford a firm hold when winding in tape. Measurements guaranteed accurate.

With Three-eighth Inch Tapes

	Marked F	eet, Inches a	nd 8ths, On	e Side Only		
No.	240	241	243	244	245	246
Length, feet,	25	33	50	66	75	100
Wt. each, oz.,	7	9	11	14	16	19
Each,	\$2 75	3 00	3 40	4 25	4 50	5 75
	Marked fe	et, 10ths and	1 100ths, On	e Side Only		
No.	240 D	241 D	243 D	244 D	245 D	246 D
Length, feet,	25	33	50	66	75	100
Wt. each, oz.,	7	9	11	14	16	19
Each,	\$2 75	3 00	3 40	4 25	4 50	5 75
	M	arked Metric	One Side (Only		
No.	241 M	243 M	244	M 2	45 M	246 M
Length, meters,	10	15	20		25	30
Wt. each, oz.,	9	11	14		17	19
Each,	\$3 00	3 40	4 25	5 .	5 10	5 75
Double Gr	aduations: N	Tetric and Er	nglish (ME)	English and	Metric (EN	(1)

25 50 75 82 33 66 100 Length, feet, 17 11 14 19 Wt. each, oz., 16 Each, \$3 25 3 65 4 40 5 55 6 00 6 75 7 75

243 ME

243 EM

15

244 ME

244 EM

20

245 EM

22

245 ME

25

246 ME

246 EM

30

Note—Tapes graduated with any two measurements listed above, will be supplied at price of corresponding tapes marked Metric and English.

For prices of tapes only, see page 25.

For graduations that can be supplied, see page 24.

For "Rival" tapes marked feet, inches and 16ths, an additional charge of 5% will be made.

Packed one in a box.

241 ME

241 EM

10

240 ME

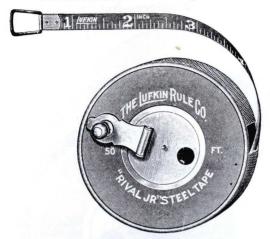
240 EM

 $7\frac{1}{2}$

"RIVAL JUNIOR" STEEL MEASURING TAPES

(Trade Mark Registered)

Instantaneous Readings-Nubian Finish



Nickel plated steel cases, folding flush handle, opened by pressing pin on opposite side. Cases have knurled edges, which afford a firm hold when winding in tape. Accuracy guaranteed.

With One-quarter Inch Tapes

	Marked	Feet, Inches an	d 16ths, On	e Side Only		
No.	1240	1241	1243	1244	1245	1246
Length, feet,	25	33	50	66	75	100
Wt. each, oz.,	4	5_	6	8	9	11
Each,	\$2 50	2 75	3 00	3 50	4 00	5 00
	Marked	Feet, 10ths and	100ths, On	e Side Only		
No.	1240 D	1241 D	1243 D	1244 D	1245 D	1246 D
Length, feet,	25	33	50	66	75	100
Wt. each, oz.,	4	5	6	8	9	11
Each,	\$2 50	2 75	3 00	3 50	4 00	5 00
		Marked Metric	One Side (Only		
No.	1241 M	1243 M	1244	M 12	45 M	1246 M
Length, meters,	10	15	20		25	30
Wt. each, oz.,	5	6	8		9	11
Each,	\$2 75	3 00	3 50) 4	35	5 00
Double Gr	aduations:	Metric and En	glish (ME),	English and	Metric (E	M)
No.	1240 ME	1241 ME 1243	ME 1244 M	IE	1245 ME	1246 ME
No.	1240 EM	1241 EM 1243	EM 1244 E	M 1245 EM		1246 EM
Length, meters,	$7\frac{1}{2}$	10 1		22	25	30
Length, feet,	25	The same of the sa	0 66	75	82	100
Wt. each, oz.,	4		6 8	9	9	11
Each,	\$3 00	3 40 4	00 4 80	5 50	6 00	7 00
		a service and the service		111.1		

Note—Tapes graduated with any two measurements listed above, will be supplied at price of corresponding tapes marked Metric and English.

For prices of tapes only, see page 25.
For graduations that can be supplied, see page 24.

The "Rival Junior" is designed to meet the demand for a light, serviceable tape at a moderate price.

Durability has not, however, been sacrificed in obtaining these noteworthy features, as the tapes are constructed in such a manner, that with proper care, they will last as long as any ordinary steel tape.

Packed one in a box.

"BANNER" STEEL MEASURING TAPES

Instantaneous Readings-Nubian Finish



Cases made of steel, covered with handsome mottled black "Auto Leather," which is extraordinarily durable. The black case with nickel plated trimmings gives a very attractive appearance, and is fitted with a folding flush handle, opened by pressing button on opposite side. The "Banner" is designed to meet the demand for a serviceable steel tape at a moderate price. The measurements are guaranteed accurate.

With Three-eighth Inch Tapes

Marked Feet, Inches and 8ths, One Side Only

No.	550	553	555	556
Length, feet,	25	50	75	100
Weight each, oz.,	7	12	17	21
Each,	\$2 45	3 00	3 90	5 00

ENGINEER'S PATTERN STEEL TAPES

Leather Cases

Instantaneous Readings-Nubian Finish



Metal lined hard leather cases, nickel plated trimmings, folding flush handle, opened by pressing pin on opposite side, two detachable rings. The tape can be readily detached from case, and we furnish an extra ring for the other end. The steel is heavier and stronger than used in the regular steel tapes, and the cases are thinner.

Marked Feet, Inches and 8ths, One Side Only

With One-quarter Inch Tapes

With Five-sixteenths Inch Tapes

No. Length, feet, Wt. each, oz., Each,	231 33 13 \$5 00	233 50 17 6 00	234 66 21 8 00	235 75 22 9 50	236 100 27 12 00	221 33 15 \$5 00	50 19 6 00	224 66 23 8 00	225 75 25 9 50	226 100 30 12 00
Wt. each, oz.,	13	17	21	22	27	\$5 00	19			

Marked Feet, 10ths and 100ths, One Side Only Will Dies sintegather Inch Tone

With One-quarter Inch Tapes						with Five-sixteenths inch Tapes						
No.	231 D	233 D	234 D	235 D	236 D	221 D			225 D			
Length, feet,	33	50	66	75	100	33	50	66	75	100		
Wt. each, oz.,	13	17	21	22	27	15	19	23	25	30		
Each,	\$5 00	6 00	8 00	9 50	12 00	\$5 00	6 00	8 00	9 50	12 00		

Marked Metric One Side Only

With One-	With Five-	-sixtee	enths	Inch '	Fapes					
No.	231 M	233 M	234 M	235 M	236 M	221 M	223 M	224 M	225 M	226 M
Length, meters,	10	15	20	25	30	10	15	20	25	30
Wt. each, oz.,	13	17	21	23	27	15	19	23	26	30
Each,	\$5 00	6 00	8 00	10 25	12 00	\$5 00	6 00	8 00	10 25	12 00

Double Graduations: Metric and English (ME), English and Metric (EM) With Five-sixteenths Inch Tanes With One-quarter Inch Tones

AA I'II OHE	-quarte	T TIII	11 T C	apes		,	A TOTT T. IA	C-SIA	CCLI	uio I	LICII I	apes
No.	{ 231 ME	233 ME	234 ME	_	235 ME	236 ME	{ 221 ME	223 ME	224 ME		225 ME	226 ME
No.	3231 EM	233 EM	234 EM	235 EM		236 EM	{ 221 EM	223 EM	224 EM	225 EM	-	226 EM
Length, meters,	10	15	20	22	25	30	10	15	20	22	25	30
Length, feet,	33	50	66	75	82	100	33	50	66	75	82	100
Wt. each, oz.,	13	17	21	22	23	27	15	19	23	25	26	30
Each.	\$5 65	7 00	9 30	11 00	11 90	14 00	\$5 65	7 00	9 30	11 00	11 90	14 00

Note—Tapes graduated with any two measurements listed above, will be supplied at price of corresponding tapes marked Metric and English.

For prices of tapes only, see page 25.

For graduations that can be supplied, see page 24.

Packed one in a box

ENGINEER'S PATTERN STEEL TAPES

Steel Cases

Instantaneous Readings-Nubian Finish



Steel cases, nicely enameled in black. Folding flush handle, opened by pressing pin on opposite side, nickel plated trimmings. The steel is heavier and stronger than used in the regular steel tapes. The tape can be readily detached from case, and we furnish an extra ring for other end. A strong, serviceable and handsome case.

With One-quarter Inch Tapes

Marked Feet, Inches and 8ths, One Side Only

	manica 1	cci, miches and	ours, one brace		
No.	$231\frac{1}{2}$	233 1/2	234 1/2	2351/2	236 1/2
Length, feet,	33	50	66	75	100
Wt. each, oz.,	13	15	18	21	25
Each,	\$4 25	5 25	7 00	8 75	10 50

Marked Feet, 10ths and 100ths, One Side Only

No.	231 ½ D	233 ½ D	234 ½ D	235½ D	236 ½ D
Length, feet,	33	50	66	75	100
Wt. each, oz.,	13	15	18	21	25
Each,	\$ 4 25	5 25	7 00	8 75	10 50

Marked Metric One Side Only

No.	231½ M	233 ½ M	$234\frac{1}{2}$ M	235½ M	236 ½ M
Length, meters,	10	15	20	25	30
Wt. each, oz.,	13	15	18	22	25
Each,	\$4 25	5 25	7 00	9 50	10 50

Double Graduations: Metric and English (ME), English and Metric (EM)

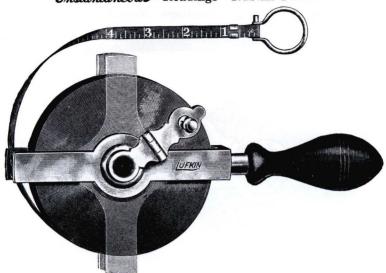
No.	231 ½ ME	233 ½ ME	234½ ME		235½ ME	236½ ME
No.	231 $\frac{1}{2}$ EM	233½ EM	234½ EM	235½ EM		236½ EM
Length, meters,	10	15	$2\overline{0}$	22	25	30
Length, feet,	33	50	66	75	82	100
Wt. each, oz.,	13	15	18	21	22	25
Each,	\$4 90	6 25	8 30	10 25	11 15	12 50

Note—Tapes graduated with any two measurements listed above, will be supplied at price of corresponding tapes marked Metric and English.

For prices of tapes only, see page 25. For graduations that can be supplied, see page 24.

ENGINEER'S PATTERN FRAME STEEL TAPES

Instantaneous Readings-Nubian Finish



Metal frames and trimmings, polished hardwood handles, two detachable rings. The tape can be readily detached from frame, and when so detached, the frame can be conveniently carried in pocket.

Tapes less than 100 feet long are put up on two arm frames; tapes 100 feet and

longer are put up on four arm frames.

With One-quarter Inch Heavy Tanes

	With	Jue-quar	ter men	neavy i	apes		
	Marked	Feet, Inche	s and 8th	s, One Sid	ie Only		
No.	271	273	274	275	276	277	278
Length, feet,	33	50	66	75	100	150	200
Wt. each, oz.,	17	20	21	24	30	38	48
Each,	\$4 25	5 25	6 25	7 50	9 00	13 50	17 50
	Marked 1	Feet, 10ths	and 100th	s, One Si	de Only		
No.	271 D	273 D	274 D	275 D	276 D	277 D	278 D
Length, feet,	33	50	66	75	100	150	200
Wt. each, oz.,	17	20	21	24	30	38	48
Each,	\$4 25	5 25	6 25	7 50	9 00	13 50	17 50
	1	Marked Me	etric One	Side Only			
No.	271 M	273 M	274 I	ví 27	5 M	276 M	277 M
Length, meters,	10	15	20		25	30	50
Wt. each, oz.,	17	20	21		25	30	41
Each,	\$4 25	5 25	6 25	5 8	00	9 00	14 50

Double Graduations: Metric and English (ME), English and Metric (EM)

No. No.	271ME 271EM	273ME 273EM	274ME 274EM		275 ME	276 ME 276 EM	 I 277 EM	277 ME	278ME 278EM
Length, meters, Length, feet,	10 33	15 50	20 66	22 75	25 82	30 100	45 150	$\begin{array}{c} 50 \\ 164 \end{array}$	60 200
Wt. each, oz., Each,	17 \$4 90	20 6 25	$7 \begin{array}{c} 21 \\ 7 \end{array} 55$	$\begin{smallmatrix}24\\9&00\end{smallmatrix}$	$\begin{array}{c} 25 \\ 9 \ 65 \end{array}$	$\begin{array}{c} 30 \\ 11 \ 00 \end{array}$	$\begin{array}{c} 38 \\ 16 \ 50 \end{array}$	$\begin{array}{c} 41 \\ 17 80 \end{array}$	48 21 50

Note—Tapes graduated with any two measurements listed above, will be supplied at price of corresponding tapes marked Metric and English.

For prices of tapes only, see page 25.

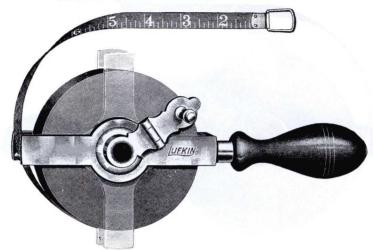
For graduations that can be supplied, see page 24.

Packed one in a box.

FRAME STEEL TAPES

Folding Handle

Instantaneous Readings-Nubian Finish



Metal frames and trimmings, nicely nickel plated. Polished hardwood handles. Made very strong and serviceable.

Tapes less than 150 feet long are put up on two arm frames; tapes 150 feet and longer are put up on four arm frames.

With Three-eighths Inch Tapes Marked Feet, Inches and 8ths, One Side Only

280	281			284	285			287	288	
									200	
									44	
\$3 00	3 50	4	50 .	5 25	6 25	7	75	12 50	15 50	
Each, \$3 00 3 50 4 50 5 25 6 25 7 75 12 50 15 50 Marked Feet, 10ths and 100ths, One Side Only										
280 D	281 D	283	D 2	84 D	285 D	28	6 D	287 D	288 D	
25	33	5	0	66	75	10	00	150	200	
14	16	1	8	20	22			37	44	
\$3 00	3 50	4	50	5 25	6 25	7	75	12 50	15 50	
	Marke	ed Met	ric One	Side	Only					
281 M	2	83 M	28	4 M	285	\mathbf{M}	286	\mathbf{M}	287 M	
10		15		20	2	5	31)	50	
16		18		20	2	3	2	1	39	
\$3 50		4 50	5	25	6	75	7	75	13 00	
ations:	Metr	ic and	English	(ME)	, Englis	sh and	Metri	c (EM)		
(280	281	283	284		285	286		287	288	
	ME	ME	ME		ME	ME		ME	ME	
	281	283	284	285		286	287		288	
EM	EM	$\mathbf{E}\mathbf{M}$	EM	EM		\mathbf{EM}	\mathbf{EM}		$\mathbf{E}\mathbf{M}$	
71/2	10	15	20	22	25	30	45	50	60	
25	33	50	66	75	82	100	150	164	200	
14	16	18	20	22	23	24	37	39	44	
						0 ==	40	1 . 00		
\$3 50	4 15	5 50	6 55	7 75	8 40	9 75	15 50	16 30	19 50	
	25 14 \$3 00 Marked 280 D 25 14 \$3 00 281 M 10 16 \$3 50 nations: { 280 ME \$ 280 { ME \$ 280 } 280 280 280 280 280 280 280 280 280 280	25 33 14 16 \$3 00 3 50 Marked Feet, 280 D 281 D 25 33 14 16 \$3 00 3 50 Marked Seet, 281 M 2 10 16 \$3 50 attions: Metr. { 280 281	25 33 50 4 283 Marked Met 281 M 283 M 10 15 16 18 3 50 4 50 4 50 4 50 281 283 M 10 15 16 18 3 50 4 50 281 283 M 10 15 16 18 3 50 4 50 281 283 M 10 10 15 16 18 3 50 4 50 281 283 M 10 10 15 16 18 3 50 4 50 281 283 M 10 10 15 16 18 18 18 18 18 18 18 18 18 18 18 18 18	25 33 50 14 16 18 \$3 00 3 50 4 50 Marked Feet, 10ths and 100 280 D 281 D 283 D 2 5 33 50 4 50 Marked Metric One 281 M 283 M 28 M 28 M 28 M 28 M 28 M 28 M 2	25 33 50 66 14 16 18 20 \$3 00 3 50 4 50 5 25 Marked Feet, 10ths and 100ths, O 280 D 281 D 283 D 284 D 25 33 50 66 14 16 18 20 \$3 00 3 50 4 50 5 25 Marked Metric One Side 281 M 283 M 284 M 10 15 20 16 18 20 16 18 20 16 18 20 16 18 20 16 18 20 16 18 20 21 283 284 — Metric and English (ME) { 280 281 283 284 — { 280 281 283 284 285 } { EM EM EM EM EM EM 7½ 10 15 20 22 25 33 50 66 75 14 16 18 20 22	25 33 50 66 75 14 16 18 20 22 \$3 00 3 50 4 50 5 25 6 25 Marked Feet, 10ths and 100ths, One Side 280 D 281 D 283 D 284 D 285 D 25 33 50 66 675 14 16 18 20 22 \$3 00 3 50 4 50 5 25 6 25 Marked Metric One Side Only 281 M 283 M 284 M 285 10 15 20 2 16 18 20 2 16 18 20 2 16 18 20 2 16 18 20 2 16 18 20 2 16 18 20 2 16 18 20 2 16 18 20 2 16 18 20 2 16 18 20 2 16 18 20 2 16 18 20 2 16 18 20 2 16 18 20 2 16 18 20 2 16 18 20 2 16 18 20 2 16 18 20 2 17 25 33 50 66 75 82 14 16 18 20 22 23	25 33 50 66 75 10 14 16 18 20 22 2 28 300 3 50 4 50 5 25 6 25 7 Marked Feet, 10ths and 100ths, One Side Only 280 D 281 D 283 D 284 D 285 D 28 25 33 50 66 75 10 14 16 18 20 22 2 281 M 283 M 284 M 285 M 10 15 20 25 16 18 20 25 16 18 20 25 16 18 20 25 16 18 20 25 16 18 20 25 16 18 20 25 16 18 20 25 16 18 20 25 16 18 20 25 16 18 20 25 16 18 20 25 16 18 20 25 16 18 20 25 16 18 20 25 16 18 20 25 16 18 20 25 16 18 20 25 16 18 20 23 284 ME	25 33 50 66 75 100 14 16 18 20 22 24 \$3 00 3 50 4 50 5 25 6 25 7 75 1 Marked Feet, 10ths and 100ths, One Side Only 280 D 281 D 283 D 284 D 285 D 286 D 25 33 50 66 75 100 14 16 18 20 22 24 \$3 00 3 50 4 50 5 25 6 25 7 75 Marked Metric One Side Only 281 M 283 M 284 M 285 M 286 10 15 20 25 30 16 18 20 23 25 16 18 20 23 25 16 18 20 23 25 16 18 20 23 25 16 18 20 23 25 16 18 20 23 25 17 15 16 18 20 23 25 18 280 281 283 284 — 285 286 — { 280 281 283 284 — 285 286 — { 280 281 283 284 — 285 286 287 { EM	25	

tapes marked Metric and English.

For prices of tapes only, see page 25.

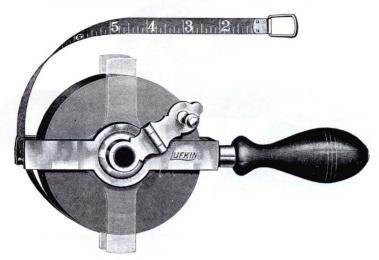
For graduations that can be supplied, see page 24.

Packed one in a box.

FRAME STEEL TAPES (EXTRA WIDE)

Folding Handle

Instantaneous Readings-Nubian Finish



Metal frames and trimmings, nicely nickel plated. Polished hardwood handles. Made very strong and serviceable.

Tapes less than 150 feet long are put up on two arm frames; tapes 150 feet and longer are put up on four arm frames.

With One-half Inch Tapes

Marked Feet, Inches and 8ths, One Side Only											
No.	291	293	294	295	296	297	298				
Length, feet,	33	50	66	75	100	150	200				
Wt. each, oz.,	17	21	23	25	31	42	51				
Each,	\$4 25	5 25	6 25	7 50	9 00	13 50	17 50				
Marked Feet, 10ths and 100ths, One Side Only											
No.	291 D	293 D	294 D	295 D	296 D	297 D	298 D				
Length, feet,	33	50	66	75	100	150	200				
Wt. each, oz.,	17	21	23	25	31	42	51				
Each,	\$4 25	5 25	6 25	7 50	9 00	13 50	17 50				
	1	Marked Me	etric One S	Side Only							
No.	291 M	293 M	294 I	A 29	5 M	296 M	297 M				
Length, meters,	10	15	20		25	30	50				
Wt. each, oz.,	17	21	23		27	31	46				
Each,	\$4 25	5 25	6 25	8	00	9 00	14 50				
Double Graduations: Metric and English (ME), English and Metric (EM)											

Metric and English (IV Double Graduations: 291ME 293ME 294ME — 295 ME296ME — -297ME **298M**E No. 298EM 291EM 293EM 294EM 295EM -—— **296**EM **297**EM -25 50 60 22 30 45 15 20 10 Length, meters, 164 200 66 75 82 100 150 Length, feet, 50 33 51 25 27 31 42 46 17 23 Wt. each, oz., 21 16 50 17 80 21 50 7 55 9 00 9 65 11 00 6 25 \$4 90 Each,

Note—Tapes graduated with any two measurements listed above, will be supplied at price of corresponding tapes marked Metric and English.

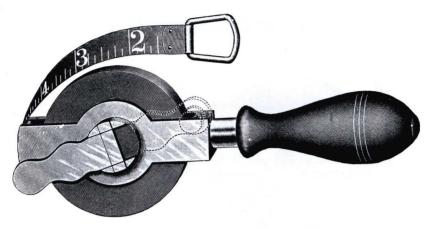
For prices of tapes only, see page 25.

For graduations that can be supplied, see page 24.

Packed one in a box

LOCK HANDLE FRAME STEEL TAPES

Instantaneous Readings-Nubian Finish



These frames are the same as our Engineer's and regular pattern Frame tapes, except in the winding apparatus. This consists of the regular frame, but is fitted with a folding lock handle, which folds over the tape, enabling one to stop it at any desired length. This handle, on account of its length, also affords increased winding leverage, which, together with the large knob, make it especially convenient and easy winding.

With One-quarter Inch Engineer's Pattern Tapes, Detachable Rings

12ths of feet, 10ths of feet,	1271 1271 D	1273 1273 D	1274 1274 D	1275 1275 D	1276 1276 D
Length, feet,	33	50	66	75	100
Wt. each, oz.,	17	20	21	24	30
Each,	\$4 25	5 25	6 25	7 50	9 00

With Three-eighth Inch Tanes

No.	1281	1283	1284	1285	1286
No.	1281 D	1283 D	1284 D	1285 D	1286 D
	33	50	66	75	100
	16	18	20	22	24
	\$3 50	4 50	5 25	6 25	7 75
		No. 1281 No. 1281 D 33 16	No. 1281 1283 No. 1281 D 1283 D 33 50 16 18	No. 1281 D 1283 D 1284 D 33 50 66 16 18 20	No. 1281 1283 1284 1285 No. 1281 D 1283 D 1284 D 1285 D 33 50 66 75 16 18 20 22

With One-half Inch Tapes

12ths of feet,	No.	1291	1293	1294	1295	1296
10ths of feet,	No.	1291 D	1293 D	1294 D	1295 D	1296 D
Length, feet,		33	50	66	75	100
Wt. each, oz.,		17	21	23	25	31
Each,		\$4 25	5 25	6 25	7 50	9 00

All above tapes are furnished with two arm frames, except Nos. 1276 and 1276 D, which are furnished with four arm frames.

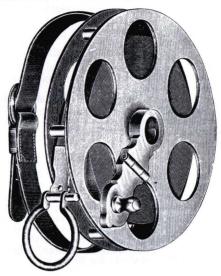
Tapes marked Metric measure one side only, same price as corresponding lengths in feet.

Lock Handle Frame Tapes, marked Metric and English, will be supplied at price of corresponding tapes marked Metric and English, as listed on pages 19, 20 and 21.

For prices of tapes only, see page 25. For graduations that can be supplied, see page 24.

"WOLVERINE" STEEL TAPES

Instantaneous Readings-Nubian Finish



Open metal reel, with nickel plated brass folding handle. Leather strap on the reverse side, by which the tape can be firmly held when winding. This reel is very strong, and is built to withstand the most severe usage. The metal is given a satin finish, which presents a beautiful appearance.

With One-quar	ter Inch	ith Five	e-sixtee	nths I	nch T	apes					
Marked Feet, Inches and 8ths, One Side Only											
No.		374 137				1324	1325	1326			
Length, feet,	50	66 75			50	66	75	100			
	19	24 25			22	28	30	38			
Wt. each, oz.,		50 9 5		•		8 50	9 50	12 00			
Each,	\$7 00 8	30 93	0 12 00	4	7 00	0 30	9 30	12 00			
	Marked Feet, 10ths and 100ths, One Side Only										
		74 D 1375			323 D 1		325 D	1326 D			
Length, feet,	50	66 75	100		50	66	75	100			
Wt. each, oz.,	19	24 25			22	28	30	38			
Each.		50 9 5		4		8 50	9 50	12 00			
Each,	p1 00 C	, 50 , 5	0 12 00	4	7 00	0 00	9 30	12 00			
	I	Marked Me	etric One	Side Only	•						
No. 1	373 M 13	74 M 1375	M 1376 M	[1	323 M 13	$324 \mathrm{M} 1$	325 M	1326 M			
Length, meters,	15	20 25	30		15	20	25	30			
Wt. each, oz.,	19	24 30	32		22	28	35	38			
		3 50 10 2		\$			10 25	12 00			
Each,	p, 00 c	00 10 2	5 12 00	,	,, 00	0 00	10 20	12 00			
Double Gradu	ations:	Metric and	English ((ME), En	glish and	d Metri	ic (EM))			
1373	1374 -	1375	1376	(132	3 1324		1325	1326			
No. ME	ME	ME	ME) M	E ME		ME	ME			
1373	1374 1	.375	1376	(132	3 1324	1325		1326			
No. EM		EM	$\mathbf{E}\mathbf{M}$) EI				$\mathbf{E}\mathbf{M}$			
Length, meters, 15	20	22 25	30	15		22	25	30			
Length, feet, 50	66	75 82	100	50		75	82	100			
Wt. each, oz., 19	24	25 30	32	22		30	35	38			
Each, \$8 00		00 11 90		\$8 (14 00			
Note—Tapes graduat				ж -							

Note—Tapes graduated with any two measurement tapes marked Metric and English.

For prices of tapes only, see page 25.

For graduations that can be supplied, see page 24.

Packed one in a box.

SPECIAL GRADUATIONS

Aside from the regular graduations described on opposite page, we are in a position to furnish steel tapes marked with the following special graduations:

1/4 and 5/16 Inch Tapes:

Graduated feet, inches and 32nds. Graduated feet, inches and 8ths. Graduated feet, inches and 4ths.

Graduated feet and inches only.
Graduated 25 feet (300 inches) in consecutive inches and 16ths.
Graduated in Links and Poles.

Graduated in Vara Measurements.

Graduated in Nya and Gamla Measurements.

3/8 Inch Tapes:

Graduated feet, inches and 32nds.

Graduated feet, inches and 16ths. Graduated feet and inches only.

Graduated feet, inches and 10ths of inches.

Graduated 25 feet (300 inches) in consecutive inches and 16ths.

Graduated 50 feet (600 inches) in consecutive inches and 8ths. (See page 10.)

Graduated in Diameter Measurements. (See page 10.)

Graduated millimeters entire length.

Graduated 10ths and 100ths of yards, for 20 yards. Graduated yards and fractions of yards, as fine as 1/32 yard, for 20 yards. Graduated yards and ¼ yards only, for 20 yards. Graduated in Links and Poles.

Graduated in Vara Measurements.

Graduated in Nya and Gamla Measurements.

1/2 Inch Tapes:

Graduated feet, inches and 16ths.

Graduated feet and inches only.
Graduated 50 feet (600 inches) in consecutive inches and 8ths.
Graduated feet, inches and 12ths of inches.

Graduated millimeters entire length.

Graduated in Links and Poles. Graduated in Vara Measurements.

Graduated in Nya and Gamla Measurements.

5/8 and 3/4 Inch Tapes:

Graduated feet, inches and 16ths. Graduated feet, inches and 4ths.

Prices on tapes with special graduations as listed above will be quoted upon application.

TEMPERATURE SCALE

On steel tapes, \(\frac{3}{8} \) and \(\frac{1}{2} \) inch wide, 50 or 100 feet long, with English Markings, we can furnish a Temperature Scale. This is a scale marked on the last end of the tape, which gives the expansion and contraction of the tape, according to the Fahrenheit Thermometer. Where very accurate measurements are required, we recommend the use of tapes furnished with this scale.

Extra for temperature scale, \$1.00.

Note—For information regarding the Metric System, see page 110.

200 60

REGULAR GRADUATIONS

English

Steel Tapes Graduated in 12ths:

Have the foot graduated to inches and each inch graduated to 8ths, except Reliable Jr., Challenge Jr. and Rival Jr., which have the inch graduated to 16ths.

Steel Tapes Graduated in 10ths:

Have the foot graduated into ten equal parts, each of which is subdivided into ten parts, making the ultimate graduation 1/100th foot.

Woven Tapes Graduated in 12ths:

Have the foot graduated to inches, and each inch graduated to 4ths, except Nos. 500 and 600 series Metallic, Sterling and, No. 940 series Universal Tapes, which have the foot graduated to inches, each inch being sub-divided into halves. Junior Metallic Tapes have the foot graduated to inches, each inch being sub-divided into 8ths.

Woven Tapes Graduated in 10ths:

Have the foot graduated into ten equal parts, each part being sub-divided into halves, except Junior Metallic Tapes which have the foot graduated into ten equal parts, each of which is subdivided into ten parts.

Metric

Steel Tapes with Metric Measurements:

Have the first decimeter graduated into millimeters, balance of tape graduated into centimeters.

Woven Tapes with Metric Measurements:

Are graduated centimeters throughout.

STEEL TAPES WITHOUT CASES

With Regular Graduations

Light, One-quarter Inch Wide

For "Reliable Junior," "Challenge Junior," and "Rival Junior" Tapes

Tanath foot	25	33	50	66	75	-	100
Length, feet, Length, meters,	7 1/2	10	15	20	-	25	30
Marked one side,	\$2 25	2 50	2 75	3 25	3 50	3 85 5 50	4 50 6 50
Marked both sides,	\$2 75	3 15	3 75	4 55	5 00	3 30	0 30

Heavy, One-quarter and Five-sixteenths Inch Wide

For Engineer's Pattern, Engineer's Frame, Lock Handle, and "Wolverine" Tapes 150 200 50 66 75 Length, feet, 33 50 60 20 25 30 15 Length, meters, 10 14 50 6 00 6 50 7 50 11 00 12 00 \$3 25 4 00 5 00 Marked one side, 18 50 9 50 14 00 15 30 7 50 8 15 Marked both sides, \$3 90 6 30 5 00

Three-eighths Inch Wide

	For "Challen	ge,"	"Rival,"	"Fra	me" ar	id Lock	t Hand	le Tap	es	
Length, feet,	25	33		66	75		100	150		
Length, rect,	-1/			20		25			50	

Marked one side, Marked both sides, \$2 90 3 25 4 00 5 05 5 50 6 00 7 25 12 00 13 30 16 00

One-half Inch Wide

The second section 12	or "Chai	ienge,	" "Fra	me ai	ia roci	Litanu	ic rap	CB		
Length, feet,	25	33	50	66	75	-	100	150		200
Length, meters,	71/6	10	15	20		25	30		50	60
Marked one side,	¢3 00	3 25	3 75	4 75	5 50	6 00	7 00	11 00	12 00	14 50
		3 00	4 75	6 05	7 00	7 65	9 00	14 00	15 30	18 50
Marked both sides,	φ3 30	0 10	1 10	0 00						

DETACHABLE RINGS FOR ENGINEER'S PATTERN TAPES

Two one inch round detachable rings are furnished with each Engineer's Pattern Tape, as shown on pages 17, 18, 19 and 23.

EXTRA DETACHABLE RINGS OR HANDLES

Wt. per Pair Per Pair No. **580**—1 in. round, 1 oz. \$0 50 " **581**—3 " oval, 1 " 1 00



TAPE HOOKS

No. 581

For attaching to steel tapes.

Measures from inside of hook.

No. **551**—For $\frac{1}{4}$ inch tapes Each, \$0.60 **552**— " $\frac{3}{8}$ " " " .60



No. 584

CLAMP HANDLES

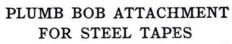
For attaching to any part of a long steel tape, thus enabling one to adapt it to any desired length. Brass, nicely nickel plated.

No. 584—Wt. 4 oz., Each, \$1 00



For applying exact tension at which a steel tape is standard. Brass, nickel plated. Indicating tension up to 20 pounds by half pounds.

No.**586**—Wt. 4 oz., Each, \$2 50



These are used in oil fields for gauging oil in tanks, and this attachment is included in the measurement of the tapes supplied. The plumb bobs are provided with a snap for detaching from the tape when not in use. We can furnish these for any of the Engineer's, Lock Handle and Frame Tapes shown on pages 19, 20, 21 and 22.

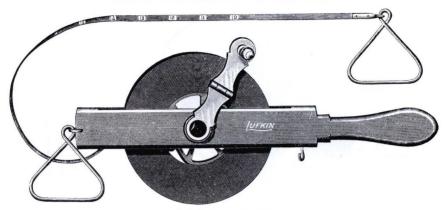
No.	588—Wt.	6	oz.	 	Extra,	each,	\$1	10
44	589— "	13	"	 	(6	"	1	50
66	590- "	18	"		. 6	66	2	25



No. 589



Etched Graduations-Nubian Finish



Patented Aug. 18, 1903



With heavy ¼ inch steel tape. Nicely finished hardwood reel, with large metal folding handle, and two large detachable rings. Trimmings nicely nickel plated. The graduations on these tapes are etched, and wherever graduated, the steel has a bright, raised surface, with the figures etched in. The steel being tempered and of the finest quality the graduations and figures will never be effaced, but will always show up clear and distinct. As a convenient, strong, durable chain tape for heavy field work ours excels all others, and we guarantee it in every way. Rawhide thongs will be furnished in place of metal rings when so specified.

Graduations

All chain tapes shown on this page are graduated one side only in feet every foot, or links and poles every link, as ordered. Tapes graduated in feet will be furnished with end feet graduated in tenths and hundredths, but can be furnished with end feet graduated in twelfths if specified. Tapes graduated in links have end links graduated in tenths of links. Tapes with metric measure are graduated one side only, the first decimeter in millimeters, balance of first meter in centimeters, balance of tape in decimeters. When so ordered, tapes will also be furnished with an extra foot before the zero mark, graduated in hundredths from right to left, without extra charge.

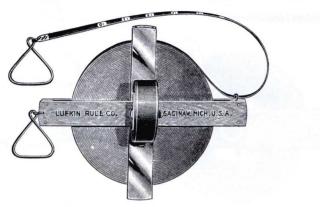
Tapes Only, with Rings

Tapes complete, with recei						=									
				Wt. 1	Each	Ea	ach					Wt. I	Eacl	n Ea	ach
No.	5100	100	ft.,	21/2	lbs.	\$6	00	No.	05100	100	ft.,	21/4		\$4	00
"	5150	150	"	33/4	"	7	50	"	05150	150	"	3	"	5	50
"	5200	200	u	$4\frac{1}{2}$	"	9	00	"	05200	200	"	33/4	"	7	00
"	5300	300	"	$5\frac{1}{2}$	"	12	50	"	05300	300	"	5	"	10	50
"	5066	100	links,	2	"	5	00	"	05066	100	links,	13/4	"	3	00
"	5132	200	"	$3\frac{1}{2}$	"	7	00	"	05132	200	"	23/4	"	5	00
"	5198	300	"	41/2	"	9	00	"	05198	300	"	33/4	"	7	00
"	5082M	25	meter,	21/4	"	5	75	"	$05082\mathrm{M}$	25	meter,	2	"	3	75
"	5100 M	30	"	21/2	"	6	50	"	$05100\mathbf{M}$	30	"	21/4	"	4	50
"	5164 M	50	"	33/4	"	9	50	"	$05164\mathrm{M}$	50	"	31/4	"	7	50
"	5328 M	100	"	53/4	"	17	00	"	$05328\mathrm{M}$	100	"	$5\frac{1}{4}$	"	15	00
Ree	lonly					2	00	Rin	gs only				per	pair	50

Packed one in a box.

Tapes Complete, with Reel

Etched Graduations-Nubian Finish





Tape Complete, with Reel

Reel Only, when Folded



With heavy ¼ inch steel tape. Nicely finished reel fitted with cross-arms, which keep the tape in place when winding or unwinding. When tape is in use and removed from the reel, the cross-arms of the reel fold into the frame, as shown above, so that even the large sizes can be conveniently carried in the pocket. The graduations on these tapes are etched, and wherever graduated, the steel has a bright, raised surface, with the figures etched in. The steel being tempered and of the finest quality the graduations and figures will never be effaced, but will always show up clear and distinct. Rawhide thongs will be furnished in place of metal rings when so specified.

Graduations

All chain tapes shown on this page are graduated one side only in feet every foot, or links and poles every link, as ordered. Tapes graduated in feet will be furnished with end feet graduated in tenths and hundredths, but can be furnished with end feet graduated in twelfths if specified. Tapes graduated in links have end links graduated in tenths of links. Tapes with metric measure are graduated one side only, the first decimeter in millimeters, balance of first meter in centimeters, balance of tape in decimeters. When so ordered, tapes will also be furnished with an extra foot before the zero mark, graduated in hundredths from right to left, without extra charge.

	Tapes Complete, with Reel								Tapes Only, with Rings						
				Wt.	Each	Ea	ach					Wt.	Eac	h E	ach
No.			ft.,	3	lbs	\$7	50	No.	06100	100	ft	21/4	lbs.	. \$4	00
"	6150	150	"	31/4	"	9	00	"	06150	150	"	3	"	. 5	50
"	6200	200	"	41/2	"	10	50	"	06200	200	"	33/4	"	7	00
"	6300	300	"	71/4	"	14	00	"	06300	300	"	5	"	10	
"	6500	500	"	9	"	21	50	"	06500	500	"	81/4	"	18	100000000000000000000000000000000000000
"	6650	650	"	111/2	"	28	00	"	06650	650	"	10	"	24	
"	6660	660	"	111/2	"	28	50	"	06660	660	"	10	"		00
"	6066	100	links,	21/2	"	6	50	"	06066		links.	13/4	"		00
"	6132	200	"	31/4	"	8	50	"	06132	200	"	23/4	"		00
"	6198	300	"	41/2	"	10	50	"	06198	300	"	33/4	"		00
"	6330	500	"	71/2	"	15	50	"	06330	500	"	51/4	"		00
"	6082M	25	meter.	23/4	"	7	25	"	$06082\mathrm{M}$	25	meter.		"		75
"	$6100 \mathrm{M}$	30	"	3	"	8	00	"	06100 M	30	"	21/4	"	4	50
"	$6164 \mathrm{M}$	50	"	31/4	"	11	00	"	$06164\mathrm{M}$	50	"	31/4	"	7	50
"	6328M	100	"	71/2	"	18	50	"	06328M		"	514	"	15	00
Reel	only					3	50	Ring	gs only				oer		50
	Doolrad	000	in a has						_					•	

Etched Graduations-Nubian Finish



Tape complete with Reel



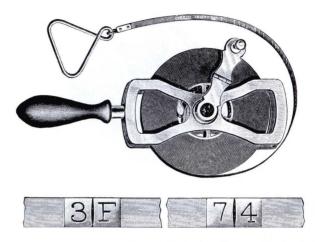
With heavy 1/8 inch steel tapes, hardwood frame with substantial sheet steel open reel. Large metal folding handle and two detachable rings. One side of frame is provided with a large and convenient leather loop for holding. The graduations on these tapes are etched, and wherever graduated, the steel has a bright, raised surface, with the figures etched in. The steel being tempered, and of the finest quality the graduations and figures will never be effaced, but will always show up clear and distinct. Rawhide thongs will be furnished in place of metal rings when so specified.

Graduations

All chain tapes shown on this page are graduated one side only in feet every foot, or links and poles every link, as ordered. Tapes graduated in feet will be furnished with end feet graduated in tenths and hundredths, but can be furnished with end feet graduated in twelfths if specified. Tapes graduated in links have end links graduated in tenths of links. Tapes with metric measure are graduated one side only, the first decimeter in millimeters, balance of first meter in centimeters, balance of tape in decimeters. When so ordered, tapes will also be furnished with an extra foot before the zero mark, graduated in hundredths from right to left, without extra charge.

	Tapes	mplete	, witl	el	Tapes Only, with Rings										
				Wt.	Each	Ea	ach					Wt. I	Eac	h Ea	ach
No.	4100	100	ft.,	31/4	1bs.	\$7	50	No.	04100	100	ft.,	13/4	1bs.	\$4	00
"	4150	150	u	33/4	"	9	00	"	04150	150	"	2	"	5	50
"	4200	200	"	41/	"	10	50	"	04200	200	"	21/4	"	7	00
"	4300	300	"	51/2	"	14	00	"	04300	300	"	31/4	"	10	50
"	4500	500	"	7	"	21	50	"	04500	500	"	5	"	18	00
"	4650	650	"	81/2	"	28	00	"	04650	650	"	61/4	"	24	50
"	4660	660	"	81/2		28	50	"	04660	660	"	61/4	"	25	00
"	4066		links,	3	"	6	50	44	04066	100	links,	11/2	"	3	00
"	4132	200	"	31/2	"	8	70(500)	"	04132	200	"	2	"	5	00
"	4198	300	"	41/4	"	10	50	"	04198	300	"	21/4	"	7	00
"	4330	500	"	53/4	"	15	50	"	04330	500	"	31/2	"	12	00
"	4082M	25	meter,	3	"	7	25	"	$04082 \mathrm{M}$	25	meter.	$1\frac{1}{2}$	66	3	75
"	4100 M	30		31/4	"	8	00	"	$04100\mathrm{M}$	30	"	134	"	4	50
"	4164 M	50		33/4	"	11	00	"	$04164\mathrm{M}$	50	"	2	"	7	50
"	4328 M			53/4	"	18	50	"	04328M	100	u	31/2	"	15	00
Ree	l only			1.5		3	50	Rin	gs only					pair	50
	Packed	one	in a box	х.											

Graduated on Babbitt Metal



This tape is designed to answer the requirements of the most severe usage, and to take the place of the old-time, yet indestructible, steel chain. It is made of practically unbreakable steel, heavily coated with white metal to prevent rusting and corrosion, and somewhat heavier than the ordinary chain tape.

Graduations are stamped into Babbitt Metal at each foot, end feet in tenths; or at each link, end links in tenths of links. Each tape is provided with a pair of detachable handles, or rawhide thongs, as desired.

Special attention is called to this reel, which is built especially for Babbitt Metal tapes. Nickel plated metal frame, with folding winding handle. A very serviceable reel, easily wound and of beautiful finish.

Note—All tapes 150 feet and longer are put up on Four Arm metal reels.

	Tapes	Complete	e, with Ree	1	Tapes Only, with Rings							
		3/16 In.	Wide		3/16 In. Wide							
			Wt. Each	Each			Wt. Each	Each				
No.	2100	100 ft.,	$2\frac{3}{4}$ lbs.	\$6 00	No. 02100	100 ft.,	2 lbs.	\$4 00				
"	2150 2200	150 " 200 "	31/2 "	8 50 9 35	" 02150 " 02200	150 " 200 "	2/4	5 50 6 35				
"	2300	300 "	5½ " 6 "	11 40	" 02300	300 "	$\frac{3\frac{1}{4}}{4\frac{3}{4}}$ "	8 40				
"	2500	500 "	9 "	18 65	" 02500	500 "	71/2 "	13 65				
"	2066	100 links,	21/2 "	5 25	" 02066	100 links	$1\frac{3}{4}$ "	3 25				
"	2132	200 "	3 "	8 25	" 02132	200 "	21/2 "	5 25				
"	2198	300 "	51/2 "	9 35	" 02198 " 02330	300 "	31/4 "	6 35				
••	2330	500 "	6½ "	15 25	" 02330	500 "	5 "	10 25				
		5/16 In.	Wide			5/16 In.	Wide					
No.	3100	100 ft.,	31/4 lbs.	\$6 00	No. 03100	100 ft.,	$2\frac{1}{2}$ lbs.	\$4 00				
"	3150	150 "	4 "	8 50	" 03150	150 "	31/4 "	5 50				
"	3200	200 "	63/4 "	9 35	" 03200	200 "	41/2 "	6 35				
"	3300	300 "	73/4 "	11 40	" 03300 " 03500	300 "	61/2 "	8 40				
"	3500	500 "	1374	18 65	03000	500 "	101/4 "	13 65				
"	3066	100 links,	3	5 25 8 25	" 03066 " 03132	100 links, 200 "	, 2 "	3 25 5 25				
"	3132 3198	200 " 300 "	$\frac{3\frac{1}{2}}{6\frac{3}{4}}$ "	9 35	" 03132 " 03198	300 "	41/2 "	6 35				
"	3330	500 "	8 "	15 25	" 03330	500 "	7 "	10 25				
	0000	000	O	10 20	00000	000	•	10 23				

TATainh b

SURVEYOR'S CHAIN TAPES

Graduated on Brass Sleeves





With 1/8 and 1/8 inch steel tapes, heavily coated with white metal to prevent rusting and corrosion. Graduations are stamped on brass sleeves, carefully soldered to the tape. Each tape is provided with a pair of detachable handles or rawhide thongs, as desired.

Graduations

Regular —Graduated every foot, end feet to 10ths.

Style "A"—Graduated every five feet, first and last five feet every foot, end feet to 10ths.

Style "B"—Graduated every 10 feet, first and last five feet every foot, end feet to 10ths.

Note—Unless graduations Style "A" or "B" are specified, tapes with regular gradua-

tions will be shipped. The following prices are for tapes without reels:

	0 T 1		6 F		Style "A"	Style "B'	' Weight
1/	8 Inch	3/16 Inch		Regular	Style A	Style B	
Ť	apes	Tapes	Length	Each	Each	Each	Each, Approx.
No.	07100	No. 08100	100 ft.	\$10 00	\$7 00	\$5 00	$2\frac{1}{4}$ lbs.
"	07160	" 08150	150 "	14 00	9 50	7 50	3 "
"	07200	" 08200	200 "	18 00	12 50	9 00	33/4 "
"	07300	" 08300	300 "	27 00	18 50	12 50	51/4 "
"	07500	" 08500	500 "	45 00	31 00	20 00	81/4 "

Marked in Links

Regular —Graduated every link, end links to 10ths of links.

Style "A"-Graduated every five links, first and last five links every link, end links to 10ths of links.

-Graduated every ten links, first and last five links every link, end links to Style "B"-

1/8 Inch	3/16 Inch		Regular	Style "A"		
Tapes	Tapes	Length	Each	Each	Each	Each, Approx.
No. 07066	No. 08066	100 links	\$9 00	\$6 50	\$4 50	$1\frac{3}{4}$ lbs.
" 07132	" 08132	200 "	16 00	12 00	7 50	23/4 "
" 07198	" 08198	300 "	24 00	17 00	11 00	33/4 "
" 07330	" 08330	500 "	40 00	28 00	18 00	6 "

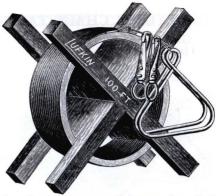
Marked in Meters

Graduated every meter, end meters to decimeters.

				weight
1/8 Inch Tapes	3/16 Inch Tapes	Length	Each	Each, Approx.
No. 07082M	No. 08082M	25 meter	\$8 50	$1\frac{3}{4}$ lbs.
" 07100 M	" 08100 M	30 "	10 00	2 1/4 " 3 1/2 "
" 07164 M	" 08164 M	50 "	15 00	3½ "
" 07328 M	" 08328 M	100 "	30 00	6 "
Packed one in	a box.			

Prices on Reels for Tapes as Shown Above

100 to 200 ft. long	Each	\$3	50	Wt. each, 2 lbs.
300 to 500 ft. long	"	5	00	Wt. each, $2\frac{1}{2}$ lbs.



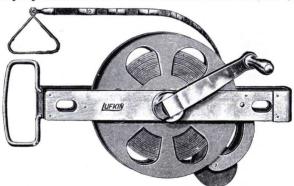
The above illustration shows our new and improved method of packing Surveyors Chain Tapes, when ordered without frames. We wind the tape upon a wood saw-buck enabling the merchant to more conveniently carry them in stock, also making it easier for the user to wind them into reels.

SHOULDERS FOR CHAIN TAPES



Some surveyors use in chaining, a tape equipped with shoulders. These shoulders assist in locating the zero and the last graduation. They are carefully soldered to the tape and when so ordered, will be supplied on any of our chain tapes.

Extra per pair..... \$0 50



Our No. 1914 Reel, illustrated above, is an all steel reel and is constructed in such a manner that it will withstand the most severe usage. The frame is 14 inches long, the winding handle 5 inches long, thus enabling the winding of a long tape with exceptional ease and rapidity. A hardwood roller or spool is fitted between the sides or discs of reel which, by means of a spring, presses towards the axis of reel, causing the tape to wind up evenly and tightly, and keeping it in place. The handle is flush folding and locks into either end of the frame. For convenience in carrying and winding in tape, a metal handle is attached to one end of the frame.

This reel can be used with any of our Chain Tapes shown on pages 27 to 31, but we especially recommend it for our Babbitt Metal and Brass Sleeve Chain Tapes shown on

pages 30 and 31.

In ordering, always state what length, width and style of tape is to be used with reel.

Prices on No. 1914 Reel

For tapes 100 feet long	50
For tapes 200 to 300 feet long Each, 1:	1 00
For tapes 500 feet long. Each, 12	250
Wt. each, approximately 3½ lbs.	

THE "CRIPPLE CREEK" REEL



Patented February 4, 1902



Aluminum Frame 14 inches long; nickel plated steel reel 8 inches in diameter. A hardwood roller or spool is fitted between the sides or discs of reel which by means of a spring presses toward the axis of reel, causing the tape to wind up evenly and tightly and keeping it in place. Long, neat and strong aluminum winding handle with large metal finger hold, giving a winding leverage of nearly five inches, and enabling the winding of a long tape with exceptional ease and rapidity. A leather strap for carrying is attached to one end of the frame.

The Cripple Creek Reel is the neatest, lightest, most convenient, easiest working and most durable reel for long steel tapes made.

It is especially designed for our Chain Tapes, as shown on pages 27 to 31, and will carry an eighth inch tape with etched graduations up to 1,000 feet in length, a quarter inch tape with etched graduations up to 500 feet in length, and Babbitt Metal and Sleeve Chain Tapes up to 300 feet in length.

Price of Cripple Creek Reel Each, \$18 00

Weight of Reel, $4\frac{1}{2}$ lbs.

Packed one in a box.

STAFF FOR CRIPPLE CREEK REEL

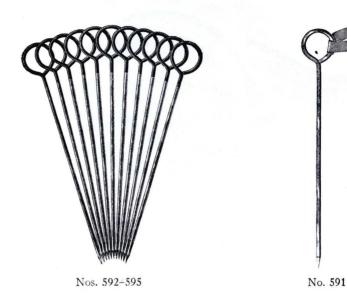
Forty inches long, of hard maple wood; aluminum socket with heavy set screw at one end into which the reel fits and is securely fastened. Other end of staff is tapered by means of a heavy brass ferrule and steel point which can be firmly set into the ground. The great advantage of this staff is that it serves as a complete support in winding or unwinding the tape, and when the reel is not in use, the outfit can be conveniently carried over the shoulder.

This staff is very strong, but light and very convenient.

Price of Staff only......Each, \$4 00

Weight of Staff, 21/4 lbs.

STEEL ARROWS



The special feature of this arrow is its being made of square steel, which enables one to make absolutely accurate measurements. The point makes it possible for one to easily ream a hole in hard soil or ice, while the shape gives the arrow an especially firm setting. The red flags are of linen firmly sewed to the ring.

No.	592 — $\frac{3}{16}$ inch, round, 10 inches long. Weight per set, $1\frac{1}{4}$ lbs.	Nickel platedPer set of 11	\$ 1 30
"	593 — $\frac{3}{16}$ inch, round, 14 inches long. Weight per set, $1\frac{3}{4}$ lbs.	Nickel platedPer set of 11	1 50
u	594 - 94 inch, round, 10 inches long. Weight per set, 3/4 lbs.	PlainPer set of 11	80
"	595— ⁹ ₆₄ inch, round, 14 inches long. Weight per set, 1 lb.	PlainPer set of 11	90
	Packed one set of 11 in a box.		

Rings on Nos. 592 to 595 are enameled in bright vermilion, a new feature which will be appreciated by surveyors.

No.	596 —Steel Carrying Ring for Arrows	\$0 15
u	597 —Leather Quiver with belt loop for set of 11 arrows	2 50

Dor dogon

"ARTISAN" STEEL TAPES

Nubian Finish



The "Artisan" Tape is a first class, high grade article in every way, and its price is low. The cases are neat, compact, strong and durable. The tapes are made of the finest quality steel, 3% inches in width, heavy enough to be very serviceable, and are guaranteed accurate.

With Three-eighth Inch Tapes, Nickel Plated Cases

Marked One Side Only in Feet, Inches and Sixteenths

												1 61	doz	en
	108 — 8 ft.,													
u	112 —12 "	"	"	u	2	u	"	"	"	$2\frac{3}{4}$	"	 	18	00
"	115 —15 "	"	"	u	$2\frac{3}{8}$	"	u	"	"	$3\frac{1}{2}$	"	 	21	00
u	120 —20 "	"	"	"	$2\frac{3}{8}$	"	u	"	"	4	"	 	24	00

With Metric Measure

Marked One Side Feet, Inches and Sixteenths; Other Side in Millimeters

No.	112 EM—12 ft.	(3	meter)	wt.	per	doz.	23/4 lbs\$21	60
"	115 EM-15 "	(5	")	"	"	"	31/2 "	20

"ARTISAN" TAPES WITH DIAMETER MEASUREMENTS

These tapes are marked on one side in consecutive inches, other side with diameter graduations, enabling one, by measuring the circumference, to arrive at the exact diameter, as fine as 64ths of inches, of circular objects such as pulleys, shafting, piping, columns, etc.

No.	108 P— 8	ft., wt.	per doz.	2¼ lbs\$18	00
				23/4 " 21	
				3½ "	
«	120 P—20	" "	u u	4 " 30	00
"	115 PM—5	meter,	Millime	eters one side, Diameter Measurements in Metric	
		other s	side; wt.	. per doz. 3½ lbs	20
	D				

POCKET TAPES IN LEATHER CASES Nubian Finish



Cases of assorted colored leather, metal lined. Spring wind, center stop. German Silver trimmings. A beautiful and durable article.

With One-quarter Inch Steel Tapes		
	Per doz	zen
No. 123 —36 inches, marked inches and 16ths		
" 123 EM—36 " 1 meter; marked inches and 16ths one side, centime		00
and millimeters other side		00
" 123 D —36 " marked inches and 16ths, one side, feet, 10ths and 100		00
other side		00
Wt. per doz., 12 oz.	11	00
No. 125 —60 inches, marked inches and 16ths	10	00
		UU
172 meters, meters and rouns one side, centimeters a		00
millimeters on other side	20	00
marked inches and Tours one side, feet, Tours and Tours		00
other side	20	00
Wt. per doz., 11/4 lbs.	20	00
No. 126 —72 inches, marked inches and 16ths		00
" 126 EM—72 " 2 meters, inches and 16ths one side, centimeters	ind	
millimeters on other side	22	00
" 126 D -72 " marked inches and 16ths one side, feet, 10ths and 100		
other side	22	00
Wt. per doz., $1\frac{1}{2}$ lbs.		
With One-quarter Inch Enamel Linen Tapes		
	Per doz	zen
No. 193 —36 inches, marked inches and 8ths	\$9	00
" 193 EM—36 " 1 meter; marked inches and 8ths one side, centime	ers	
and millimeters other side	10	00
Wt. per doz., 12 oz.		
No. 195 —60 inches, marked inches and 8ths	12	00
" 195 EM-60" $1\frac{1}{2}$ meters, inches and 8ths one side, centimeters		
millimeters other side		50
Wt. per doz., 1 lb.		

"MIDGET" STEEL POCKET TAPES IN LEATHER CASES



Spring wind, center stop, metal lined leather cases, and German Silver trimmings. Diameter of case one inch, tape $\mathfrak{s}_2^{\mathfrak{s}}$ inch wide. The smallest tape made.

POCKET STEEL TAPES

Nubian Finish



German Silver Cases, Spring Wind, With Center Stop

		M	arked (ne Si	de O	nly;	Incl	ies	and	16ths	5				
						150.00								er do	
No.	153 —36 inch	nes, 1/4 i	nch tap	e, wt.	per o	doz.,	$\frac{3}{4}$	lbs.						\$8	50
"		" 1/4	"	"	"	"	11/4	" .						11	
"	156 —72	" 1/4	" "	"	"	"	11/4	" .						12	00
"	158 —96	" 1/4	a a	"	"	"	$1\frac{1}{2}$	" .						18	00
		Mar	ked On	e Side	Onl	y, Fe	et, I	nch	es ar	ıd 1 6	ths				
No.	158 F — 8 fe	et, 1/4 i	nch tap	e, wt.	per o	doz.,	$1\frac{1}{2}$	lbs.						\$18	00
"	1510 —10	" 5	"	"	"	"								25	
"	1512 —12	" <u>5</u>	"	"	"	"	23/4	"						28	00
"	1518 —18	" 5	" "		"	"	4							36	00
	Marked 1	Feet, Inc	ches an	1 16th	s On	e Sid	e, F	eet,	10th	ıs an	d 10	0ths	Other	Side	
No.	1510 D—10 1512 D—12 1518 D—18	feet, $\frac{5}{16}$	inch ta	pe, wi	per	doz.	$\begin{array}{c} 2\frac{1}{2} \\ 2\frac{3}{4} \\ 4 \end{array}$	2 lb	S					\$28 32 42	00 00 00
				With	Me	tric N	I eas	ure							
No.	153 EM—36		1 meters												50
No.	155 EM—60) inches,	1½ me meters												00
No.	156 EM—72	2 inches,	2 meters												00
No	1510 EM—1	10 feet,		r, <u>1</u> i	nch	Тар	e, fee	et, i	inche	s an	d 16	iths (one si	de,	
No	. 1518 EM—:	18 feet,		r, 5	inch	Таре	, fee	et, i	nche	s an	d 10	óths	one si	de,	
			W	th Dia	amet	er M	easu	rem	ents						
No	1512 P —	12 feet,	Diamet For des	er inc	hes c	other	side	; wt	t. per	r doz	. 23/4	lbs.		\$32	2 00
	Packed one-	-half doz	en in a	box.											

POCKET STEEL TAPES Nubian Finish



Round Edge Nickel Plated Cases, Spring Wind, Center Stop

"	146 D 148 D	$-72 \\ -96$	"	$\frac{1}{4}$ $\frac{1}{4}$	u	u	u	u	u	$\frac{1\frac{1}{2}}{1\frac{1}{2}}$	u	• • • •			 	 . 12	00
		Marke							,								
No	. 143 EI	M-36 i	nches	5, 1	mete	r, 1/2	inc!	n Tap	e,	wt. pe	er	doz.	1 1	b.	 	 .\$8	00

" 145 EM—60 " 1½" ¼ " " " " 1½" 12 00

" 146 EM—72 " 2 " ¼ " " " " " 1½" 12 00

" 148 EM—96 " 2½" ¼ " " " " " 1½" 16 00

Packed one-half dozen in box.

"PETIT" STEEL POCKET TAPES



Spring Wind, Center Stop, German Silver Cases, $1\frac{1}{16}$ Inches in diameter With $\frac{5}{32}$ Inch Steel Tape

POCKET STEEL TAPES

With Architect's Scales-Nubian Finish



Round Edge Nickel Plated Cases, Spring Wind, with Center Stop

Tapes ¼ inch wide, graduated inches and 16ths one side, architect's scale other side.
Per dozen
No. 391—60 inches, with $\frac{1}{8}$ inch scale marked and numbered from one to 480,
wt. per doz. 1¼ lbs\$10 00
No. 392—60 inches, with 1/4 inch scale marked and numbered from one to 240,
wt. per doz. 1¼ lbs

POCKET STEEL TAPES

With Architect's and Engineer's Scales

Square edge, German Silver Cases, Spring Wind, Center Stop, $\frac{3}{8}$ inch tapes, two meters (78¾ inches) long. Graduated one side full length, consecutive inches and 16ths bottom edge, centimeters and millimeters top edge. Other side laid out in 12 inch sections, graduated both edges and containing $\frac{1}{8}$, $\frac{3}{8}$, $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, 1½ and 3 inch architect's scales, with subdivisions; also engineer's scales with 10, 20, 30 and 40 parts to the inch. An Invaluable Article to Architects, Draughtsmen, Civil and Mechanical Engineers, etc.

METRIC CONVERSION STEEL TAPES

German Silver Cases, Spring Wind, Center Stop, $\frac{5}{16}$ inch tapes. Graduated one side, bottom edge in inches and 16ths, top edge in millimeters; other side contains tables showing comparative values of English and Metric weights, bottom edge being marked in kilograms, top edge in pounds, both properly subdivided. So arranged that one can determine the metric equivalent of an English weight or measurement, and *vice versa*, without hindrance or liability of error. Especially valuable to exporters, importers, shippers, forwarding agents, customs officials and others.

No. 396—2 meters (78¾ inches), wt. per doz. 2 lbs.....\$30 00

Packed one-half dozen in a box.

POCKET LINEN TAPES



Round Edge Nickel Plated Cases, Spring Wind, Center Stop With One-quarter Inch Enameled Linen Tapes

	Marked Inches and 8ths One Side Only Per		
No.	173 —36 inches; wt. per doz. 3/4 lbs	3 4 5	50 50 00
	Marked Inches and 8ths One Side, Millimeters Other Side		
No.	173 EM—36 inches, 1 meter; wt. per doz. 34 lbs	4 6 7	50 00 00
	With Five-sixteenths Inch Enameled Linen Tapes		
No.	188 —96 inches, marked inches and 8ths, wt. per doz. 1¾ lbs\$ 188F— 8 feet, marked feet, inches and 8ths, wt. per doz. 1¾ lbs Packed one-half dozen in a box.	8	50 50

"MARVEL" POCKET LINEN TAPES



Nickel plated cases, spring wind, center stop. A very handsome and durable article.

With One-quarter Inch Enameled Linen Tapes

				1 Inch																					zen
No.	3173 —36 ir 3175 —60	iches, w	. per	doz.	1 3/4 1	lbs.	٠									٠.							 .\$	2	25 00
"	3175 —60 3176 —72	" "	"	"	1	"	٠.																	3	25
	נ	Marked	Inche	s and	8ths	Oı	1e	Si	de	, I	/Iil	lin	ne	ter	S	0	he	er	Si	de	,				
No.	3173 EM—	36 inche	s, 1	meter	, wt	. p	er	do	z.	3	41	bs										 	 .\$	2	50
	3175 EM—		$\frac{1}{2}\frac{1}{2}$	"	"	6		"		1		u					٠.					 		3	25



"MARVEL" POCKET STEEL TAPES Nubian Finish

No. 3143—36 inches, ¼ inch wide, graduated in inches and 16ths.

Nickel plated cases, spring wind with center stop. The

"Marvel" sells itself from an attractive leatherette display
box of one dozen tapes. The latest thing in pocket tapes,
and a beautiful and durable article. Wt. per gross, 10½ lbs. Per gross......



																		P	er o	loz	zet
No.	3145—	-60 inche	s. wt.	per	doz. 1	lb													\$	6	0
		-72 "																			
				•	1 (~:	41	0-		:4.	78./	r:11	:	^ +	 O+	ha	- C				
					s and S													ide	:	500	
No.	3143 I	EM-36 i	nches,	1	meter	, wt.	per	doz.	3/4	lbs	S			٠,	 			ide	; \$	5	0
Vo.	3145 I		nches,	1 1½	meter.	, wt.	per "	doz.	3/4 1	lbs "	š				 			ide	; \$	7	0

Above tapes are packed $\frac{1}{2}$ dozen in a box, except Nos. 3143 and 3143EM, which are packed one dozen in display box, one gross in carton.

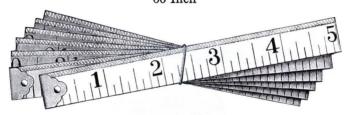
"UNIVERSAL" POCKET TAPES



No. 165—60 inches. Nickel plated cases. A handsome Pocket Tape of excellent quality. Spring wind, center stop. Good quality painted tape, marked in inches and 8ths. Put up in strong and attractive display boxes, and sells on sight. Wt. per gross, 1034 lbs. Packed one gross in paper box, 5 gross in wooden case.

Per gross...

TAILOR'S AND DRESSMAKER'S TAPES 60 Inch



Made of double thickness sateen, lockstitched edge. Graduated both sides in inches and 8ths. Brass-tipped ends.

7-16 Inch Wide	9-16 Inch Wide
Per Gross	Per gross
No. 471 —Common\$ 5 00	No. 491 —Common\$ 5 50
Wt. per gross $3\frac{1}{2}$ lbs.	Wt. per gross 4 lbs.
No. 472—Medium	No. 492 —Medium 7 00
Wt. per gross 3 ³ / ₄ lbs.	Wt. per gross $4\frac{1}{2}$ lbs.
No. 473 —Best	No. 493 —Best
Wt. per gross 4½ lbs.	Wt. per gross $4\frac{3}{4}$ lbs.
Packed one dozen in a box, one gross in	a carton.

60 Inch, with Rigid Ends (Patented)

The feature of this tape that will appeal particularly to tailors and dressmakers is the steel insertions, six inches in length, in each end of the tape, which are firmly held in place. This makes the first and last six inches rigid and it is unnecessary to grasp the extreme end of the tape in measuring. The ends are sufficiently flexible not to interfere with the taking of circular measurements.

METALLIC MEASURING TAPES

Folding Handle

Sinstantaneous Readings



Hard leather cases, folding handles, nickel plated trimmings. Tape $\frac{5}{8}$ inch wide, made of best woven linen with metallic warp. We guarantee our Metallic Tapes to be the best in the world, and less liable to shrink or stretch than any others.

Marked One Side Only in 12ths or 10ths

No.	500	501	503	504	505	506
No.	500 D	501 D	503 D	504 D	505 D	506 D
	25	33	50	66	75	100
	8	10	13	15	17	21
	\$1 70	2 00	2 50	2 80	3 10	3 90
	No. No.	No. 500 D 25 8	No. 500 D 501 D 25 33 10	No. 500 D 501 D 503 D 25 33 50 8 10 13	No. 500 D 501 D 503 D 504 D 25 33 50 66 8 10 13 15	No. 500 D 501 D 503 D 504 D 505 D 25 33 50 66 75 8 10 13 15 17

Marked Both Sides, 12ths and Links or 10ths and Links

12ths and links, 10ths and links,	No.	500 L 500 DL	501 L 501 DL	503 L 503 DL	504 L 504 DL	505 L 505 DL	506 L 506 DL
Length, feet,		25	33	50	66	75	100
Wt. each, oz.,		8	10	13	15	17	21
Each,		\$1 80	2 10	2 60	3 00	3 30	4 20

Marked Meters and Centimeters One Side Only

No.	501 M	503 M	504 M	505 M	506 M
Length, meters,	10	15	20	25	30
Wt. each, oz.,	10	13	15	17	21
Each,	\$2 00	2 50	2 80	3 40	3 90

Marked Meters and Centimeters One Side, Feet and 12ths Other Side

No.	501 ME	503 ME	504 ME	505 ME	506 ME
Length, meters,	10	15	20	25	30
Wt. each, oz.,	10	13	15	17	21
Each,	\$2 10	2 60	3 00	3 60	4 20

Tapes marked with feet on back instead of links, or with any two measurements listed above, will be supplied at price of corresponding tapes marked both sides.

For prices of tapes only, see page 45.

Packed one in a box.

METALLIC MEASURING TAPES

Flush Handle Instantaneous Readings



Hard leather cases, double folding flush handle, opened by pressing pin on opposite side. Tape 1/8 inch wide, made of best woven linen, with metallic warp. We guarantee our Metallic Tapes to be the best in the world, and less liable to shrink or stretch than any others.

Marked One Side Only in 12ths or 10ths										
12ths of feet, 10ths of feet,	No.	600 D	601 601 D	603 603 D	604 604 D	605 D	606 606 D			
Length, feet, Wt. each, oz.,		25 9	33 11	50 13	66 18	75 20	100 22			
Each,		\$2 00	2 30	2 80	3 10	3 40	4 20			

Marked Both Sides, 12ths and Links or 10ths and Links

12ths and links, 10ths and links,	No.	600 L 600 DL	601 L 601 DL	603 L 603 DL	604 L 604 DL	605 L 605 DL	606 L 606 DL
Length, feet,		25	33	50	66	75	100
Wt. each, oz.,		9	11	13	18	20	22
Each,		\$2 10	2 40	2 90	3 30	3 60	4 50

Marked Meters and Centimeters One Side Only

No.	601 M	603 M	604 M	605 M	606 M
Length, meters,	10	15	20	25	30
Wt. each, oz.,	11	13	18	20	22
Each,	\$2 30	2 80	3 10	3 70	4 20

Marked Meters and Centimeters One Side, Feet and 12ths Other Side

No.	601 ME	603 ME	604 ME	605 ME	606 ME
Length, meters,	10	15	20	25	30
Wt. each, oz.,	11	13	18	20	22
Each,	\$2 40	2 90	3 30	3 90	4 50

Tapes marked with feet on back, instead of links, or with any two measurements listed above, will be supplied at price of corresponding tapes marked both sides.

For prices of tapes only, see page 45.

Packed one in a box.

JUNIOR METALLIC MEASURING TAPES

Flush Handle



Hard leather cases, nickel plated trimmings, double folding flush handle, opened by pressing pin on opposite side. Tape is made of best woven linen with metallic warp. Marked one side only in 10ths or 12ths.

The Junior Metallic is a companion to our popular "Reliable Junior" and is less than one-half the size and weight of a regular Metallic Tape.

With Three-eighth Inch Tapes

	WILL THE	ce eighth men	Lapes			
Mar	ked Feet, Ir	iches and 8ths, Oi	ne Side O	nly		
No.	660	661		663		664
Length, feet,	25	33		50		66
Wt. each, oz.,	4	5		6		7
Each,	\$1 80	2 00		2 25		2 75
Mari	ked Feet, 10	ths and 100ths, O	ne Side (Only		
No.	660 D	661 D		663 D		664 D
Length, feet,	25	33		50		66
Wt. each, oz.,	4	5		6		7
Each,	\$1 80	2 00		2 25		2 75
Junio	r Metallic	Tapes Only, W	ithout (Cases		
Length, feet,	25	33		50		66
Each,	\$0 75	0 90		1 25		1 50
Metallic	Tapes Onl	y Without Case	es, 5⁄8 In	ch Wide	е	
Length, feet,	25	33 50	66	75		100
Length, meters,		10 15	20		25	30
Marked one side, each,	\$0 80	1 00 1 40	1 60	1 80	2 10	2 60
Marked both sides, each,	\$0 90	1 10 1 50	1 80	2 00	2 30	2 90
Packed one in a box.						

"STERLING" LINEN MEASURING TAPES

(Trade Mark Registered)



Hard leather cases, flush handle, nickel plated trimmings. Tape 5% inch wide, made of pure linen, and reinforced with leather the first four inches.

	Ma	rked One	Side Only in	12ths or 1	.0ths				
12ths of feet, 10ths of feet, Length, feet, Wt. each, oz., Each,	No. No.	400 400 D 25 8 \$1 25	401 401 D 33 9 1 40	403 D 50 12 1 65	404 D 66 14 1 95	405 405 D 75 16 2 10	406 D 100 19 2 50		
Marked Both Sides, 12ths and Links or 10ths and Links									
12ths and links, 10ths and links, Length, feet, Wt. each, oz., Each,	No. No.	400 L 400 DL 25 8 \$1 35	401 L 401 DL 33 9 1 50	403 L 403 DL 50 12 1 75	404 L 404 DL 66 14 2 15	405 L 405 DL 75 16 2 30	406 L 406 DL 100 19 2 80		
	Mar	ked Meters	s and Centim	eters, One	Side Onl	y			
No. Length, meters, Wt. each, oz., Each,		401 M 10 9 \$1 40	403 M 15 12 1 65	404 20 14 1 9	1	405 M 25 16 2 25	406 M 30 19 2 50		
Marko	d Mater	and Cent	imeters One	Side Feet	and 12th	s other Side			

Marked Meters and Centimeters One Side, Feet and 12ths other Side **403** ME **404** ME 405 ME 406 ME **401** ME No. 25 30 20 15 Length, meters, 10 12 1 75 19 14 16 Wt. each, oz., 2 45 2 15 Each, \$1 50

Tapes marked with any two measurements listed above, will be supplied at price of corresponding tapes marked both sides.

"S	terling"	Capes O	nly, Wi	thout Ca	ases		
Length, feet,	25	33	50	66	75		100
Length, meters,		10	15	20		25	30
Marked one side, each,	\$0 65	0 75	1 00	1 15	1 25	1 40	1 50
Marked both sides, each,	\$0 75	0 85	1 10	1 35	1 45	1 60	1 80
Packed one in a box.							

"UNIVERSAL"

(Trade Mark Registered)

MEASURING TAPES

The following pages illustrate our line of low-priced and popular measuring tapes under our "Universal" brand, and we guarantee that this line of goods is superior to any others of the same class on the market.

ASS SKIN MEASURING TAPES



With One-half Inch Cotton Tape Waterproof Coated

Cases brass bound and sides handsomely cream enameled. Folding handles.

No.	710	711	712	713	714	715	716
Length, feet,	25	33	40	50	66	75	100
Wt. per doz., lbs.,	$2\frac{1}{2}$	3	31/4	4	5	51/2	$6\frac{3}{4}$
Price per dozen.	\$3 75	4 00	4 50	5 00	6 00	7 50	9 00

Marked Meters and Centimeters One Side Only

No.	711 M	713 M	714 M	715 M	716 M
Length, meters,	10	15	20	25	30
Wt. per doz., lbs.,	3	4	5	$5\frac{1}{2}$	$6\frac{3}{4}$
Price per dozen,	\$4 00	5 00	6 00	8 25	9 00

Marked Meters and Centimeters One Side, Feet and Inches Other Side

No.	711 ME	713 ME	714 ME	715 ME	716 ME
Length, meters,	10	15	20	25	30
Wt. per doz., lbs.,	3	4	5	$5\frac{1}{2}$	$6\frac{3}{4}$
Price per dozen,	\$5 00	6 50	7 75	11 00	12 00

Medium Grade



Cases brass bound and sides handsomely enameled in maroon. Folding handles.

With One-half Inch Union (Cotton and Linen) Tape, Extra Quality Waterproof Coated

No.	720	721	722	723	724	725	726
Length, feet,	25	33	40	50	66	75	100
Wt. per doz., 1bs.,	$2\frac{1}{2}$	3	31/4	4	5	$5\frac{1}{2}$	63/4
Price per dozen,	\$4 75	5 00	5 75	6 25	7 25	8 75	10 75

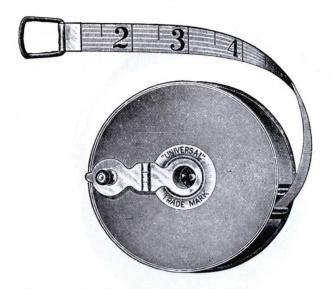
Marked Meters and Centimeters One Side Only

No.	721 M	723 M	724 M	725 M	726 M
Length, meters,	10	15	20	25	30
Wt. per doz., lbs.,	3	4	5	$5\frac{1}{2}$	63/4
Price per dozen,	\$5 00	6 25	7 25	9 50	10 75

Marked Meters and Centimeters One Side, Feet and Inches Other Side

No.	721 ME	723 ME	724 ME	725 ME	726 ME
Length, meters,	10	15	20	25	30
Wt. per doz., lbs.,	3	4	5	51/2	63/4
Price per dozen,	\$5 75	7 25	8 50	11 25	12 75
Packed one-half doze	en in a box.				

Extra Grade



Cases brass bound and sides handsomely enameled in maroon. Folding handles. These tapes are corded with pure, unbleached linen, making them especially strong and durable.

With One-half Inch Linen Corded Tape Waterproof Coated

No.	730	731	732	733	734	735	736
Length, feet,	25	33	40	50	66	75	100
Wt. per doz., 1bs.,	$2\frac{1}{2}$	$3\frac{1}{4}$	31/4	4	$5\frac{1}{2}$	$5\frac{1}{2}$	7
Price per dozen,	\$5 00	5 50	7 00	8 00	9 00	10 00	12 50

Marked Meters and Centimeters One Side Only

No.	731 M	733 M	734 M	735 M	736 M
Length, meters,	10	15	20	25	30
Wt. per doz., lbs.,	31/4	4	$5\frac{1}{2}$	$5\frac{1}{2}$	7
Price per dozen,	\$5 50	8 00	9 00	11 00	12 50

Marked Meters and Centimeters One Side, Feet and Inches Other Side

No.	731 ME	733 ME	734 ME	735 ME	736 ME
Length, meters,	10	15	20	25	30
Wt. per doz., lbs.,	31/4	4	51/2	$5\frac{1}{2}$	7
Price per dozen,	\$6 25	9 00	10 25	12 75	14 50

Bend Leather Cases



Cases made of steel, covered with handsome mottled russet "Auto Leather," which is very durable and presents a beautiful appearance. Brass folding handles and trimmings. These tapes are corded with pure, unbleached linen, making them especially strong and durable.

With One-half Inch Linen Corded Tape Waterproof Coated

No.	930	931	932	933	934	935	936
Length, feet,	25	33	40	50	66	75	100
Wt. per doz., 1bs.,	$3\frac{1}{2}$	4	$4\frac{3}{4}$	43/4	6	6	81/2
Price per dozen,	\$11 00	12 00	13 00	14 00	15 00	16 00	18 00

Marked Meters and Centimeters One Side Only

No.	931 M	933 M	934 M	935 M	936 M
Length, meters,	10	15	20	25	30
Wt. per doz., 1bs.,	4	$4\frac{3}{4}$	6	6	81/2
Price per dozen,	\$12 00	14 00	15 00	17 00	18 00

Marked Meters and Centimeters One Side, Feet and Inches Other Side

No.	931 ME	933 ME	934 ME	935 ME	936 ME
Length, meters,	10	15	20	25	30
Wt. per doz., 1bs.,	4	$4\frac{3}{4}$	6	6	81/2
Price per dozen,	\$12 75	15 00	16 25	18 75	20 00

Bend Leather Cases



Cases made of steel, covered with handsome mottled russet "Auto Leather," which is very durable and presents a beautiful appearance. Brass folding handles and trimmings. These tapes are corded with pure, unbleached linen, making them especially strong and durable.

With Five-eighth Inch Linen Corded Tape Waterproof Coated

No.	940	941	942	943	944	945	946
Length, feet,	25	33	40	50	66	75	100
Wt. per doz., lbs.,	31/4	4	5	51/4	$6\frac{1}{2}$	7	$9\frac{1}{2}$
Price per dozen,	\$12 00	13 00	15 00	16 00	17 00	18 00	20 00

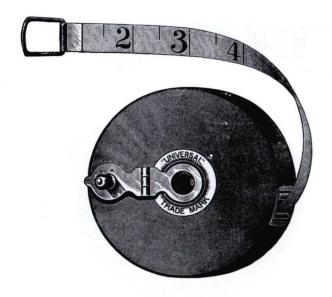
Marked Meters and Centimeters One Side Only

No.	941 M	943 M	944 M	945 M	946 M
Length, meters,	10	15	20	25	30
Wt. per doz., 1bs.,	4	$5\frac{1}{4}$	$6\frac{1}{2}$	7	$9\frac{1}{2}$
Price per dozen,	\$13 00	16 00	17 00	19 00	20 00

Marked Meters and Centimeters One Side, Feet and Inches Other Side

No.	941 ME	943 ME	944 ME	945 ME	946 ME
Length, meters,	10	15	20	25	30
Wt. per doz., 1bs.,	4	51/4	$6\frac{1}{2}$	7	91/2
Price per dozen,	\$13 75	17 00	18 25	20 75	22 00

Pressed Leather Cases



Cases of pressed leather, nicely enameled. Folding handles.

With One-half Inch Union (Cotton and Linen) Tape Waterproof Coated

No.	1020	1021	1022	1023	1024	1025	1026
Length, feet,	25	33	40	50	66	75	100
Wt. per doz., 1bs.,	31/4	$3\frac{1}{2}$	4	$4\frac{1}{4}$	$5\frac{3}{4}$	6	8
Price per dozen,	\$5 00	5 50	7 00	8 00	9 00	10 00	12 50

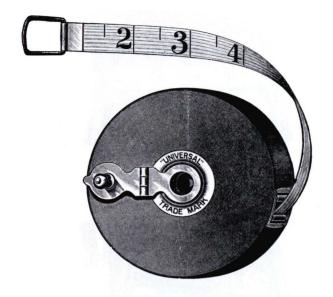
Marked Meters and Centimeters One Side Only

No.	1021 M	1023 M	1024 M	1025 M	1026 M
Length, meters,	10	15	20	25	30
Wt. per doz., lbs.,	$3\frac{1}{2}$	$4\frac{1}{4}$	$5\frac{3}{4}$	6	8
Price per dozen,	\$5 50	8 00	9 00	11 00	12 50

Marked Meters and Centimeters One Side, Feet and Inches Other Side

No.	1021 ME	1023 ME	1024 ME	1025 ME	1026 ME
Length, meters,	10	15	20	25	30
Wt. per doz., 1bs.,	$3\frac{1}{2}$	41/4	$5\frac{3}{4}$	6	8
Price per dozen,	\$6 25	9 00	10 25	12 75	14 50

Pressed Leather Cases



Cases of pressed leather, nicely enameled. Folding handles. These tapes are corded with pure, unbleached linen, making them especially strong and durable.

With One-half Inch Linen Corded Tape Waterproof Coated

No.	1030	1031	1032	1033	1034	1035	1036
Length, feet,	25	33	40	50	66	75	100
Wt. per doz., lbs.,	$3\frac{1}{2}$	$3\frac{1}{2}$	$4\frac{1}{4}$	$4\frac{3}{4}$	6	$6\frac{1}{2}$	81/4
Price per dozen,	\$6 50	7 00	8 25	10 00	12 00	13 00	15 00

Marked Meters and Centimeters One Side Only

No.	1031 M	1033 M	1034 M	1035 M	1036 M
Length, meters,	10	15	20	25	30
Wt. per doz., 1bs.,	$3\frac{1}{2}$	$4\frac{3}{4}$	6	$6\frac{1}{2}$	81/4
Price per dozen,	\$7 00	10 00	12 00	14 00	15 00

Marked Meters and Centimeters One Side, Feet and Inches Other Side

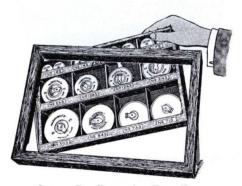
No.	1031 ME	1033 ME	1034 ME	1035 ME	1036 ME
Length, meters,	10	15	20	25	30
Wt. per doz., lbs.,	$3\frac{1}{2}$	$4\frac{3}{4}$	6	$6\frac{1}{2}$	81/4
Price per dozen,	\$7 75	11 00	13 25	15 75	17 00

MEASURING TAPE DISPLAY CASE

Assortment No. 20



Closed. Tapes on Display



Open. For Removing Tape Tray
Size: 12½ x 17¼ x 2½ Inches

An exceptionally attractive method of displaying Measuring Tapes, in a handsome dark oak case with glass front. Consists of a frame which stands in a reclining position, and a tray containing twelve different styles of the best selling measuring tapes. The tray, as shown in illustration, is separately constructed, and may be instantly either dropped back to remove tapes, or may be removed entirely from the frame to show customer, or the tape tray can be used separately to place in show case or show window. The tray is held in place by a simple fastener on the back of frame, which, being out of sight, acts as a lock preventing theft of goods. The name and length of every tape is shown directly below the tape, and a space is provided for inserting the retail price. Packed safely in a corrugated paper carton, and as soon as unpacked is ready for display. These cases are furnished without charge with the following assortment of tapes:

Contents of Display Case

2	Only	No.	. 143 —36 in.	Pocket Steel	1	Only	No.	1243—50 ft.	Rival Jr. Steel
2	"	"	145 —60 ''	"	1	"	"	243 —50 "	Rival Steel
2	"	"	173 —36 "	" Linen	1	"	"	503 —50 ''	Metallic
2	"	"	175 —60 "	" "	1	"	"	943 —50 "	Linen Corded
1	4.4	"	263 —50 ft.	Challenge Steel	1	"		733 —50 "	"
1	"	"	1263 —50 "	" Jr. Steel	1	"	"	713 —50 "	Ass Skin

Weight of case packed for shipment, 14 lbs.

BOXWOOD RULE DISPLAY CASE

Assortment No. 10



Closed. Rules on Display



Open. For Removing Rule Tray
Size: 12½ x 17¼ x 2½ Inches

An exceptionally attractive method of displaying Boxwood Rules in a handsome dark oak case, with glass front. Consists of a frame which stands in a reclining position, and a tray containing twelve different styles of the bext selling Boxwood Rules. The tray as shown in the illustration is separately constructed, and may be instantly either dropped back to remove rules or may be removed entirely from the frame to show customer, or the rule tray can be used separately to place in show case or show window. The number of every rule is shown directly below the rule, and a space is provided for inserting the retail price. The tray is held in place by a simple fastener on the back of frame, which, being out of sight, acts as a lock preventing theft of goods. Packed safely in a corrugated paper carton and as soon as unpacked is ready for display. These cases are furnished without charge with the following assortment of rules:

Contents of Display Case

11/6	Doz	No.	651 B	(68)	1/4	Doz.	No.	882	(76)
1	"	"	751	(61)	1/4	6.6	"	386	(32)
1/4	66	"	761	(63)	$\frac{2}{3}$	"	44	465	(69)
1/	44	"	771	(84)	1/4	4.4	"	3851	$(66\frac{1}{2})$
14	4.4	"	781	(62)	1-6	11	4.6	2051	
1/4	4.6	"	762 B	(7)	1-12	2 ''	"	2062	

Weight of case packed for shipment, 141/2 lbs.

MACHINE DIVIDED STEEL RULES

On the following pages we list our very complete line of Machine Divided Steel Rules. Great care is taken in the graduating of our rules and we guarantee them to be accurate. The figures are large, black and distinct.



TEMPERED RULES

With Readable Graduations

Every mechanic realizes the difficulty in reading the 64th graduations. To overcome this difficulty, We Originated a system whereby we numbered the graduations in every inch at the 8, 16, 24, 32, 40, 48 and 56 points, as illustrated above. This not only enables one to instantly read the desired graduations, but practically prevents the possibility of an error. All our numbers 2204, 2207, 2604 and 2607 rules are made in this way up to 12 inches in length.



TEMPERED RULES

With End Graduations

Our numbers 2204 and 2604 rules up to 12 inches in length, are made with both ends of one side graduated in 32nds, as illustrated above.

MACHINE DIVIDED STEEL RULES TEMPERED

Approximate Thickness, 1-20 Inch



- No. 2204—No. 4 graduations. Marked one side 8ths and 16ths, other side 32nds and 64ths. Ends on all rules from 2 to 12 inches, graduated to 32nds. Readable graduations furnished on all rules up to 12 inches in length.
- No. 2207—No. 7 graduations. Marked one side 16ths and 32nds, other side 64ths and 100ths. Readable graduations furnished on all rules up to 12 inches in length.

Prices of Tempered Steel Rules

Nos. 2204 and 2207

Approximate											
Width, inches,	1/2	1/2	$\frac{1}{2}$	5/8	3/4	7/8	1	11/4	11/4	$1\frac{1}{4}$	11/4
Length, inches,				4	6	9	12	18	24	36	48
Wt. per doz.,	2 oz.	3 oz.	4 oz.	7 oz.	13 oz.	$1\frac{1}{2}$ lbs.	2 lbs.	$4\frac{1}{2}$ lbs.	6 lbs.	9 lbs.	12 lbs.
Price per doz.,	2 40	3 60	4 80	6 00	7 80	12 00	15 00	24 00	30 00	60 00	84 00

HALF FLEXIBLE

Approximate Thickness 1-50 Inch



These rules are made of finest quality spring tempered steel. They are the same widths as the regular tempered rule, and about one-half the thickness, but heavier than the flexible rule.

- No. **2604**—No. 4 graduations. Marked one side 8ths and 16ths, other side 32nds and 64ths. Ends graduated to 32nds. Furnished with Readable Graduations.
- No. 2607—No. 7 graduations. Marked one side 16ths and 32nds, other side 64ths and 100ths. Furnished with Readable Graduations.

Prices of Half Flexible Steel Rules

Nos. 2604 and 2607

Length, inches,	2	3	4	6	9	12
Wt. per doz., oz.,	3	4	5	7	10	17
Price per dozen,	\$ 3 60	4 80	6 00	7 80	12 00	15 00

MACHINE DIVIDED STEEL RULES



FLEXIBLE

These rules are made of the finest quality spring tempered steel, very thin and flexible. From 1 to 12 inches they are $\frac{1}{2}$ inch wide, and will easily conform to a 2 inch circle. Rules from 18 to 36 inches are $\frac{3}{4}$ inch wide, and a trifle heavier. Graduated one side only.

No. 2110-F	lexible,	No.	10	Graduations,	32nds and 64ths.
No. 2111—	"	"	11	"	64ths and 100ths.
No. 2112-	"	"	12	"	50ths and 100ths.

Prices of Flexible Steel Rules

Nos. 2110, 2111, 2112

Lengths,	3 in.	4 in.	6 in.	9 in.	12 in.	18 in.	24 in.	36 in.
Wt. per doz.,	2 oz.	3 oz.	4 oz.	7 oz.	8 oz.	$1\frac{1}{2}$ lbs.	21/4 lbs.	3 lbs.
Price per doz.,	\$4 80	6 00	7 80	12 00	15 00	24 00	30 00	60 00

NARROW

Approximate Thickness, 1-20 Inch

1 LUFKIN RULE CO. 2 SAGINAW MICH.U.S.A. 3 TEMPERED

3 inch wide, spring tempered, graduated one edge of each side.

No.	2310 —No.	10	Graduations,	32nds and 64ths.
No.	2311—"	11	"	64ths and 100ths.
No.	2312—"	12	"	50ths and 100ths.

Prices of Narrow Steel Rules

Nos. 2310, 2311, 2312

Lengths,	4 in.	6 in.	9 in.	12 in.
Wt. per doz.,	3 oz.	4 oz.	6 oz.	10 oz.
Price per doz.,	\$6 00	7 80	12 00	15 00

METRIC AND ENGLISH TEMPERED

Approximate Thickness, 1-20 Inch



No. 3227—Marked one side, upper edge, millimeters; lower edge, half millimeters. Other side, upper edge, 16ths, 32nds and 64ths inches; lower edge, 10ths, 20ths, 50ths and 100ths inches.

Approximate	17	17	5/	2/	7/	1	11/	11/	11/	11/
Width, inches, $\frac{1}{2}$	$\frac{1}{2}$	/2	5/8	$\frac{3}{4}$	/8	1	1/4	$1\frac{1}{4}$	$1\frac{1}{4}$	11/4
Length, inches, 1	2	3	4	6	9	12	18	24	36	48
Wt. per doz., 2 or	. 3 oz.	4 oz.	7 oz.	13 oz.	$1\frac{1}{2}$ lbs.	2 1bs.	$4\frac{1}{2}$ lbs	. 6 lbs.	9 lbs.	12 lbs.
Price per doz., \$2 4	0 3 60	4 80	6 00	7 80	12 00	15 00	24 00	30 00	60 00	84 00

MACHINE DIVIDED STEEL RULES METRIC GRADUATIONS

TEMPERED

Approximate Thickness, 1 m m.



No. 2200 M-Marked both sides, three edges in millimeters, one edge in ½ millimeters,

Approximate Width, m m.,	13	13	19	25	32	32	32
Lengths.	5 cm	10 cm	20 cm	30 cm	40 cm	50 cm	1 m
Wt. per doz.,	3 oz.	7 oz.	$1\frac{1}{2}$ lbs.	2 lbs.	$3\frac{1}{2}$ lbs.		10 lbs.
Price per doz.	\$3 00	5 40	10 20	15 00	19 80	24 00	84 00

HALF FLEXIBLE

Approximate Thickness, ½ m m.

These rules are made of finest quality spring tempered steel. They are the same widths as the regular tempered rules, and about one-half the thickness, but heavier than the flexible rules.

No. 2600 M-Marked both sides, three edges in millimeters, one edge in ½ millimeters.

Lengths,	5 cm	10 cm	20 cm	30 cm
Wt. per doz.,	3 oz.	5 oz.	9 oz.	17 oz.
Price per doz.,	\$3 00	5 40	10 20	15 00

FLEXIBLE

These rules are made of the finest quality spring tempered steel, very thin and flexible. Rules from 5 cm to 30 cm are approximately 12 mm wide; rules from 40 cm to 1 m are approximately 19 mm wide, and a trifle heavier.

No. 2100 M-Marked one side only, upper edge millimeters, lower edge ½ millimeters.

Lengths, Wt. per doz.,	5 cm 2 oz.	3 oz.	6 oz.	8 oz.	$1\frac{1}{4}$ lbs.	2 1bs.	$\frac{1}{3\frac{1}{2}}$ lbs.
Price per doz.,	\$3 00	5 40	10 20	15 00	19 80	24 00	84 00

NARROW

Approximate Thickness, 1 m m.

No. 2300 M—Approximately 5 mm wide, spring tempered, graduated one edge of one side in millimeters, one edge of other side in $\frac{1}{2}$ millimeters.

Lengths,	10 cm	20 cm	30 cm
Wt. per doz.,	3 oz.	6 oz.	10 oz.
Price per doz	\$5 40	10 20	15 00

MACHINE DIVIDED STEEL RULES ENGLISH PATTERN



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



Figure 7



Figure 8

MACHINE DIVIDED STEEL RULES

ENGLISH PATTERN. TEMPERED

One Rounded End with Hole

Note—Numbers with the suffix "N" are ½ inch wide, 25 gauge. Numbers without the suffix "N" are ¾ inch wide, 21 gauge, in 4 and 6 inch lengths; 1½ inch wide, 19 gauge in 12 inch length.

88	
No. 2700 and 2700 N	—Marked one edge of one side only, 8ths, 16ths, 32nds and 64ths, as Figure 1. Price per doz., 4 inch, \$2.40; 6 inch, \$3.00; 12 inch, \$4.80
No. 2701 and 2701 N	—Marked one side only, 8ths and 16ths, as Figure 2. Price per doz., 4 inch, \$2.40; 6 inch, \$3.00; 12 inch, \$4.80
No. 2702 and 2702 N	—Marked one side only, 8ths, 16ths, 32nds and 64ths, as Figure 3. Price per doz., 4 inch, \$3.00; 6 inch, \$3.60; 12 inch, \$6:00
No. 2703 and 2703 N	—Marked both sides, one side 8ths and 16ths, as Figure 2, other side, 8ths, 16ths, 32nds and 64ths, as Figure 3. Price per doz., 4 inch, \$4.20; 6 inch, \$5.40; 12 inch, \$7.80
No. 2704 and 2704 N	—Marked one side only, 16ths inches and millimeters, as Figure 4. Price per doz., 4 inch, \$3.00; 6 inch, \$3.60; 12 inch, \$6.00
No. $2704\frac{1}{2}$ and $2704\frac{1}{2}$ N	—Marked one side only, 16ths, 32nds and 64ths inches, millimeters and ½ millimeters as Figure 5. Price per doz., 4 inch, \$3.00; 6 inch, \$3.60; 12 inch, \$6.00
No. 2704 ½B and 2704 ½BI	N—Marked one side only, 16ths, 32nds and 64ths inches, millimeters and ½ millimeters as Figure 5, except that markings are reversed, millimeters being on the bottom edge, inches on the top edge. Price per doz., 4 inch, \$3.00; 6 inch, \$3.60; 12 inch, \$6.00
No. 2705 and 2705 N	—Marked one side only, 16ths, 32nds and 64ths inches, and 10ths, 20ths, 50ths and 100ths inches, as Figure 6. Price per doz., 4 inch, \$3.60; 6 inch, \$4.20; 12 inch, \$6.60
No. 2706 and 2706 N	—Marked both sides, one side 16ths, 32nds and 64ths inches, 10ths, 20ths, 50ths and 100ths inches, as Figure 6; other side millimeters and ½ millimeters, as Figure 7. Price per doz., 4 inch, \$4.20; 6 inch, \$5.40; 12 inch, \$7.80
No. 2707 and 2707N	—Marked both sides, one side 16ths, 32nds and 64ths inches, millimeters and ½ millimeters as Figure 5; other side 12ths, 24ths, 48ths, 96ths inches, and 10ths, 40ths, 50ths and 100ths inches, as Figure 8. Price per doz., 4 inch, \$4.20; 6 inch, \$5.40; 12 inch, \$7.80

Weight per dozen of rules without suffix "N": 4 inch, 7 oz.; 6 inch, 9 oz.; 12 inch, 2½ lbs. Weight per dozen of rules with suffix "N": 4 inch, 3 oz.; 6 inch, 4 oz.; 12 inch, 1 lb.

All above rules packed one-half dozen in a box.

Note—Above rules will be supplied with Danish measurements, or Swedish measurements, such as Nya and Gamla, if so ordered.

MACHINE DIVIDED STEEL RULES ENGLISH PATTERN, TEMPERED



FLEXIBLE

Made of finest quality spring tempered steel, very thin and flexible, $\frac{1}{2}$ inch wide, No. 30 gauge. One rounded end with hole.

No. 2110 D —Marked one side; one edge 32nds, other edge 64ths.

- " 2110 DM—Marked one side; one edge inches and 64ths, other edge centimeters, millimeters and half millimeters.
- " 2111 D —Marked one side; one edge 64ths, other edge 100ths of an inch.

PRICES OF FLEXIBLE RULES

Length	4 in.	6 in.	9 in.	12 in.
Wt. per doz	3 oz.	4 oz.	7 oz.	8 oz.
Price per doz	\$4 20	5 40	8 40	10 80

Packed one-half dozen in a box.

CONTRACTION RULES



MACHINE DIVIDED STEEL RULES

ENGLISH PATTERN, TEMPERED

Tapping and Spanner



One rounded end with hole. Tempered steel, 4 and 6 inch rules, $\frac{3}{4}$ inch wide, 21 gauge; 12 inch rule $1\frac{1}{8}$ inch wide, 19 gauge.

No. 2721—Marked one side only, bottom edge 16ths, 32nds and 64ths inches. Top edge

Tapping and Spanner sizes.

Wt. per doz.,

4 inch, 8 oz.

6 inch, 10 oz.

12 inch, 21/4 lbs.

Price per doz.,

4 inch, \$3.60

6 inch, \$4.80

12 inch, \$6.60

No. 2722—Marked both sides; one side, bottom edge 16ths, 32nds and 64ths inches, top edge Tapping and Spanner sizes. Other side, bottom edge 16ths inches, top edge 10ths, 20ths, 50ths and 100ths inches.

Wt. per doz., Price per doz., 4 inch, 8 oz. 4 inch, \$4.80

6 inch, 10 oz. 6 inch, \$6.60

12 inch, 2¼ lbs. 12 inch, \$9.60

No. 2723—Marked both sides; one side, bottom edge 16ths, 32nds and 64ths inches, top edge Tapping and Spanner sizes. Other side, bottom edge inches and 16ths, top edge inches and 8ths.

Wt. per doz.,

4 inch, 8 oz.

6 inch, 10 oz.

12 inch, 21/4 lbs.

Price per doz.,

4 inch, \$4.20

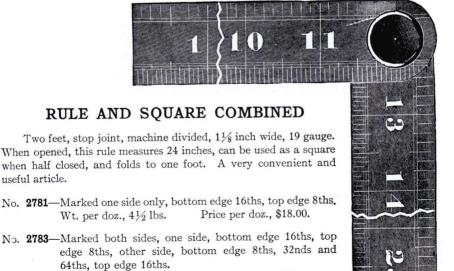
6 inch, \$6.00

12 inch, \$9.00

Packed one-half dozen in a box.

Wt. per doz., 4½ lbs.

Packed one-half dozen in a box.



Price per doz., \$24.00.

DECIMAL EQUIVALENT STEEL RULES



This rule is particularly desirable to machinists, tool makers, steel workers, etc. Made of flexible spring steel 1½ inches wide, and 6¾ inches long. Marked one side with decimal equivalents of fractions and a 6 inch scale graduated in 64ths with readable graduations. Other side marked with decimal equivalents of wire gauges and a 6 inch scale graduated in 32nds. Machine divided with figures and graduations showing black and distinct.

No. 98—Price......Each, \$0.75 Wt. per doz.—12 oz.



MECHANIC'S REFERENCE TABLES

Two in One



Made of flexible spring steel 1¼ inches wide, and 6¾ inches long. On one side appear machine screw tap sizes, each followed by tap drill size number and its decimal equivalent and the corresponding body drill size number and its decimal equivalent, commonly known as the outside diameter size. On the opposite side is a complete table of decimal equivalents of fractions, and at lower end is an inch graduated to 64ths. Has very plain figures, is easily read and is an article that particularly appeals to tool makers, die makers, machinists, etc.





No. 041. 1 ft. Steel Rules on Cards. Graduated in Inches and 16ths.

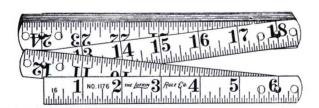
A one-foot Folding Steel Pocket Rule, made of finest quality spring steel, $\frac{3}{8}$ inch wide, No. 28 gauge, and will bend to a three inch circle. Very neat and compact and put up in a leather case for carrying in the vest pocket. Mounted on attractive display cards, one dozen rules to a card. This rule retails at 10 cents and sells on sight.

Wt. per gross, 8 lbs.

Price per gross......Net.

FOLDING STEEL RULES

With Patent Stop Joints



Made of tempered steel, ¾ inch wide. Surface of rule is bright with sunken figures and lines which show up clear and distinct. Convenient, compact, and practically indestructible. Marked both sides.

										Wt. pe	r doz.	Per d	oz.
No.	1172 —2 ft	marked	inches	and 1	6ths			 	 	 $1\frac{3}{4}$	1bs.	\$16	
"	1173 —3 "		"	66	"			 	 	 $2\frac{1}{2}$	"	25	20
"	1174 —4 "		"	"	"			 	 	 $3\frac{3}{4}$	"	33	60
46	1175 —5 "	"	"	"	"					 _	u	42	00
"	1176 —6 "		"	"	"					(1/	"	50	40
"	1177 —7 "		"	"	"					 7	"	60	80
"	1178 —8 "	"	"	"	"			 	 	 . 8	"	67	20
"	1173 ME—1 n		millimet	ers ar	nd 10	6th	s.	 	 	 . 3	"	30	00
"	1173 M —1	,	millimet								"	30	00
u	1174 EM—4 f		16ths ar								"	33	60

2 and 3 ft. and 1 meter rules packed one dozen in box; 4, 5 and 6 ft. rules packed one-half dozen in box; 7 and 8 ft. rules packed one-quarter dozen in box.

FOLDING FLEXIBLE STEEL POCKET RULES

With Patent Stop Joints



No. 1141



Rule in Metal Bound Leather Case

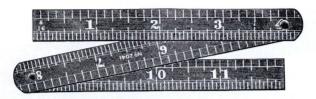
Three-eighths inch wide, flexible spring steel. Raised figures. With patent stop joints that hold rule true and rigid when extended.

Joints that hold rule true and rigid when extended.			
Marked Inches and 16ths Both Side		Rules Only,	Rules With Leather Cases
No. 1131—1 ft., 3 inch joints. " 1132—2 " 3 " " " 1141—1 " 4 " " " 1142—2 " 4 " " " 1143—3 " 4 " " " 1162—2 " 6 " " " 1164—4 " 6 " "	7t. Per Doz. 5 oz. 7 " 6 " 11 " 1 lb. 10 oz. 14 " 1 l/4 lbs.		Per Doz \$5 50 10 00 5 50 9 50 13 50 10 00 14 00 17 50
Marked Inches and 16ths One Side, Feet, 10ths and	100ths Otl	ner Side	
No. 1141 D—1 ft., 4 inch joints " 1142 D—2 " 4 " " " 1143 D—3 " 4 " " " 1162 D—2 " 6 " " " 1163 D—3 " 6 " "	6 oz. 11 " 1 lb. 10 oz. 14 "	\$4 00 7 50 11 00 7 50 11 00	\$5 50 9 50 13 50 10 00 14 00
Marked Inches and 16ths One Side, Millime	ters Other	Side	
No. 1141 EM—1 ft., 4 inch joints. " 1142 EM—2 " 4 " " " 1143 EM—3 " 4 " " " 1163 EM—3 " 6 " " " 1164 EM—4 " 6 " "	6 oz. 11 " 1 lb. 14 oz. 1¼ lbs.	\$4 00 7 50 11 00 11 00 14 50	\$5 50 9 50 13 50 14 00 17 50
Marked Millimeters One Side, Inches and 16th	ns Other Si	de	
No. 1143 ME—1 meter, 10 cm joints	1¼ lbs. 1¼ "	\$13 00 13 00	\$16 00 16 00
Marked Millimeters Both Sides			
No. 1143 M—1 meter, 10 cm joints	$1\frac{1}{4}$ lbs. $1\frac{1}{4}$ "	\$13 00 13 00	\$16 00 16 00
1, 2 and 3 ft. rules and 1 meter rules packed one dozen one-half dozen in box.	in box; 4	ft. rules	packed

Note—Unless rules with cases are specified, we will ship rules without cases.

FOLDING STEEL POCKET RULES

Machine Divided



Made of finest quality hardened and tempered steel, $\frac{1}{2}$ inch wide, No. 25 gauge. Bright surface, with black and distinct figures and graduations. Machine divided and accurate.

Rules Per D		With Cases, Per Dozen
No. 2041—1 ft., 4 inch joints, marked both sides, 16ths bottom edge, 8ths top edge	6 00 2 00	\$7 00 14 00
No. 2042 —1 ft., 4 inch joints, marked both sides, one side, bottom edge, 16ths, top edge 8ths, other side, bottom edge first two inches 32nds, third inch 64ths, remainder in 16ths. Top edge 8ths.	7 00	8 00
No. 2043—1 ft., 4 inch joints, marked both sides, one side bottom edge 16ths, top edge 8ths, other side bottom edge, first two inches in 32nds, next one-half inch in 64ths, remainder in 16ths. Top edge, first 5 centimeters in ½ millimeters, remainder in millimeters.	8 00	9 00
Packed one dozen in box.		

Packed one dozen in box. Wt. per dozen, 1 ft. rules, ½ lb., 2 ft. rules, 1 lb.

FOLDING STEEL POCKET RULES

Machine Divided with Patent Stop Joints



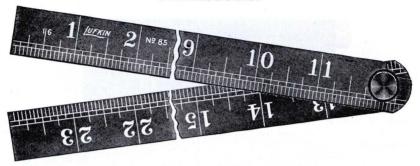
One-half inch wide. Marked one side, one edge inches and 8ths, other side, one edge, inches and 16ths. Figures and graduations cut into the steel, making same show up clear and distinct. With patent stop joints that hold rule true and rigid when extended.

																		R	ıles		Wi	th	
																	Wt.		nly		Cas		
																P	er Doz.	Per	\mathbf{D}_{0}	z.	Per I	oz.	i
No.	4141 —1	ft.,	4	inch	joints											1/2	lbs.	\$9	0	0	\$11	50)
"	4142 —2	"		"	11											1	"	15	0	0	17	50)
"	4143 —3	"	4	"	"			 								11/2	2 "	22	2	0	25	20	,
"	4144 —4	"	4	"												2	"	30	0	0	33	00)
"	4642 —2	"	6	"												1	"	15	0	0	17	50)
"	4643 —3	"	6	"	"											11/2	. "	22	2	0	25	20)
"	4644 - 4	"	6	"	"	 	ě									21/4	" "	30	0	0	33	00)

Packed one-half dozen in box, except numbers 4141 and 4642, which are packed one dozen in box.

FOLDING STEEL RULES

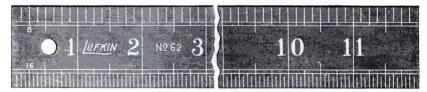
Machine Divided



Tempered steel, ¾ inch wide, 21 gauge. Graduated one edge, both sides; 12 inch joints. All the following rules have stop joints, except No. 80, which is furnished with plain joint.

	7747747														er doz	zen
No.				8ths a	and	16ths,			plain	ends			 		\$10	00
"	85	2	"	"	"	"			"						12	00
"	85	-3	"	"	"	"			"	"					20	
"	85 T	2	"	"	"	66			brass	tippe					13	
"	85 TI	M2	"	16ths	and	millin	neters.		"	""		"				00
"	86	2	"	16ths	and	circur	nference	inches.	plain			"				00
"	86 T	2	"	"	"		"	"	brass	tippe	ed e				16	00
"	87	-2	"	64ths	, 321	nds, 16	ths, 8th	s,	plain	11					13	00
"	87 T	2		"	19	"	" "		brass	tippe	ed	"	 		14	00
ш	88	-2	"	10ths	, 201	hs, 16t	hs,		plain			"	 		13	00
"	88 T	-2		"			"		brass	tippe	ed	"	 		14	00
	Wt. p	er doz	z., 2	? ft. rı	ıles,	2 lbs.;	3 ft. rt	iles, 3 lb	S.							
	Packe	d one	do	zen in	box											

STRAIGHT STEEL RULES

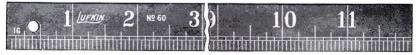


Bright surface, distinct black sunken figures and lines.

No. 62—1¼ inch x 16 gauge, 8ths upper edge, 16ths lower edge, both sides.

Length feet 1 2 3 4 5

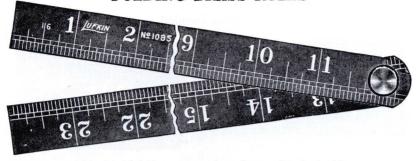
Length, feet, 1 2 3 4 5 6 Wt. per doz., lbs., $3\frac{1}{4}$ 6 $\frac{1}{4}$ 9 $\frac{1}{2}$ 11 $\frac{1}{4}$ 15 18 $\frac{3}{4}$ Price per dozen, \$8 00 15 00 22 00 28 00 48 00 60 00



No. 60—¾ inch x 21 gauge, 8ths one side, 16ths other side. Marked on lower edge only. Machine divided. This rule is especially desirable for schools and Manual Training work.

1 ft.,	Wt. per doz.,	14 oz	. Price	per doz.,	\$4 (90
2 ft.,	Wt. per doz.,	2 lbs	Price	per doz.,	8 0	00

FOLDING BRASS RULES



Hard Brass, 34 inch wide, 19 gauge, graduated one edge, both sides.		
,,,	Per dozer	1
No. 1085—2 ft., Stop Joint, 8ths and 16ths	\$ 9 00	0
" 1086—2 " " 16ths and circumference inches	15 00)
Wt. per doz., 234 lbs. Packed one dozen in box.		
Packed one dozen in box.		

BRASS STRAIGHT RULES

			(Gr	adu	ated	8th	s One	Side,	16ths Other Side	Per doz	zen
No.	1061 —3 ft.,	1	inch	X	1/8.	Wt.	per	doz.,	153/4	1bs	 . \$27	00
"	1061-4 "	1	"	X	1/8.	"	- "	"	221/2	"	 . 33	00
"	1061 —5 "	1	"	x	1/8.	"	"	"	29	"		00
"	1061 —6 "	1	"	x	1/8.	"	"	"	33	"	 . 54	00

BRASS COUNTER RULES



No. 1068—3 ft., 34 inch x 19 gauge hard brass. Yards subdivided into fractions of yards as follows: \(\frac{1}{16}\), \(\frac{1}{8}\), \(\frac{1}{4}\), \(\frac{1}{8}\), \(\frac

BLACKSMITH'S HOOK AND HANDLE RULE

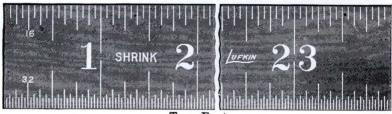


These rules are especially designed to enable blacksmiths to more conveniently measure hot pieces, and for measuring through holes or from the inside when held against a corner, etc. They are made from hard brass, $\frac{1}{10}$ inch thick, $1\frac{1}{16}$ inch wide, the graduations and figures being heavy and distinct.

Marked on both sides, lower edge, inches and 16ths, one side measures from end of rule, other side from inside of hook, adapting them for taking measurements from end of rule or inside of hook. They are graduated 12 inches, have flat handles, and measure overall 16¾ inches.

STEEL SHRINKAGE RULES

Machine Divided



Two Foot

Tempered and polished steel, 1½ inch wide. Figures and graduations cut into the steel, making same show up very clear and distinct. These rules are high grade in every respect, and are guaranteed accurate.

Shrinkages

$C - \frac{1}{10}$	inch	per f	oot.
$E-\frac{1}{2}$. "	"	"
F-3	. "	"	"
G-1/	"	".	"
H-15	"	"	"
K-3/8	"	"	"

Heavy No. 19 Ga.	Flexible No. 23 Ga	1.	
No.	No.	Pric	ce Each
81	91	Marked one side only, 16ths—32nds	\$2 25
82	92	Marked one side only, 32nds—64ths	2 50
83	93	Marked both sides, 8ths, 16ths, 32nds, 64ths	3 50
84	94	Marked both sides, one side shrinkage, 32nds—64ths.	
		other side Standard inches	3 50

Note—In ordering always state shrinkage desired. Heavy Rules weigh 8 ounces each; Flexible Rules 5 ounces each.

STEEL SHRINKAGE RULES

Etched Graduations

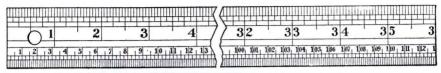


Tempered and polished steel, $1\frac{1}{6}$ x $\frac{3}{64}$ inch. Bright surface, with sunken figures and graduations. Guaranteed accurate.

Wt. per do	hs and 1 z., 3¾ 11	oths both	sides			Pe	er dozen,	\$24 00
No. Extreme length, in., Shrinkage per ft.,	90 A	90 B 24 ² ₁₂	90 C 24 ₁₀	90 D 24 1 6	90 E 24 1/4	90 F 24 ³ / ₈	90 G 24 ½ 1/2	90 H 24 5/8

Note—In ordering, always state shrinkage desired.

TINNER'S STEEL CIRCUMFERENCE RULES



(One-half size)



(One-half size)

One side circumference rule; opposite side table of measurements, as follows:

Liquid Measure—Flaring, ¼ pint to 5 gallons.

Dry Measure—Flaring, ¼ bush. to 2 bush.

Cans—Pitched Top, 1 gal. to 10 gals.

Cans—Flat Top, 1 gal. to 200 gals.

Dry Measure—Straight, 1 qt. to 3 bush.

A tool that is indispensable to every tin shop.

		3 ft.	4 ft.
No. 95-11/4 in. x 16 gauge, Pl	lainPer dozen	\$30 00	\$36 00
	lickeled"		42 00
W	Vt. per dozen, lbs	. 91/4	$12\frac{1}{2}$

STEEL CIRCUMFERENCE RULES

One side circumference rule; opposite side, top edge, 8ths of inches; bottom edge, 16ths of inches.

Totals of merics.	1 ft.	2 ft.	3 ft.	4 ft.
No. 96—1¼ in. x 16 gauge, PlainPer doze	n \$18 00	24 00	30 00	36 00
Nickeled "				
Wt. per dozen., lbs	31/4	6	91/4	$12\frac{1}{2}$

Our Circumference Rule is a very useful tool for obtaining circumferences of circles by simply measuring the diameters. As shown in cut the top edge is graduated with 16ths of inches. The bottom edge with what, for convenience, is called "circumference inches," into 8ths. The divisions of this edge, compared with the opposite edge, bear the same ratio inversely to each other, as the diameter of a circle to its circumference. Therefore, opposite the first inch on top edge is read on lower edge 3 and the fraction representing 0.1416 inches. Its use will readily be appreciated by tinners and other sheet metal workers for whom it is particularly adapted.

THE "MAGIC" PATTERN RULE

With Chart



Patented

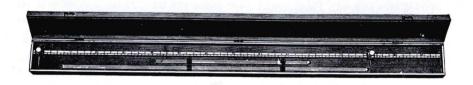
For laying out sheet metal elbow patterns up to 14 inches in diameter and at any angle desired in a few minutes' time. A great labor saving tool.

Consists of a $\frac{7}{16}$ inch square steel bar, marked circumference inches one side, and inches and 8ths other side. Fitted with brass sliding trammel heads with set screws, and steel points, all nicely nickel plated. For laying out elbow pattern, the left hand slide is fastened to the end of the bar by the set screw, and the right hand slide is set according to the diameter elbow that is wanted. A flexible steel ribbon on the top of the bar is then raised to the required height, according to angle of elbow wanted; one glance at the chart giving such height necessary according to the elbow required.

For example, suppose an elbow is wanted say 6 inches in diameter and at an angle corresponding with the long line C on the chart; set the right hand slide at figure 6 on the front of rule, get with your ordinary rule the distance from bottom of diagram on the chart of the perpendicular line 6 to where it meets the angle line C; then raise steel ribbon to this height, fasten it with set screw, and you have it set ready for a pattern.

The chart is 19 x 23 inches in size, mounted on linen and very durable, and contains, besides the elbow diagram, also rules for cutting all kinds of flaring, oval, cylindrical, cone-shaped vessels, etc., with the aid of the Magic. Besides all this, the Magic can be used for a straight edge, rule, circumference rule and trammel.

Put up in neat, hinged, wooden box, and is provided with three steel ribbons of different gauges, which may be used according to size of elbow wanted.



Price complete with chart	\$7	50
Charts only		75

Wt. each, 7 lbs.

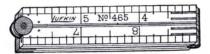
BOXWOOD RULES

In the manufacture of our Boxwood Rules nothing but the very best of materials is used. The boxwood is allowed to season for at least two years; great care is given to the metal used in the joints and trimmings; the graduations are guaranteed accurate, and on account of their superior finish they present an attractive appearance.

Note:—Rules with Metric graduations on both sides, or with Metric on one side and Inches on the other, also with "English Marking"—that is, with numbers reading from left to right, can be furnished, if so ordered.

ONE FOOT BOXWOOD RULES

Unbound. Four Fold



Per doz.

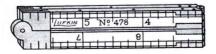
No. 465, (Old No. 69)—5% in. wide, Round Joint, Middle Plates, 8 — — 16ths, \$1 75 Packed 1 dozen in a box. Wt. per dozen, 34 lbs.

	L-1	5	Nº	476	5	4	IU	FKIN	/
9	. 4			1 .	8			- Empane	CO TOTAL COMME
		I	П	Ш		Ц		-	2

Per doz.

No. 475, (Old No. 65)—5% in. wide, Square Joint, Middle Plates, 8 — 16ths, \$2 00 No. 476, (Old No. 64)— " " Edge " 8 — 16ths, 2 75 Packed ½ dozen in a box. Wt. per dozen, ¾ lbs.

Full Bound. Four Fold



Per doz.

No. 478, (Old No. 65½)—5% in. wide, Square Joint, Full Bound, 8 — — 16ths, \$5 50 Packed ½ dozen in a box. Wt. per dozen, 1 lb.

TWO FOOT BOXWOOD RULES

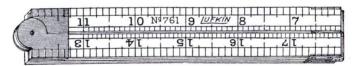
Unbound. Four Fold

ΠŢ	\Box_1	1	I	Ŧ	Ц	1	0	I N	06	551	Ι	9		UF.	KI	\(\mu\)	8		Ŧ			7		H	
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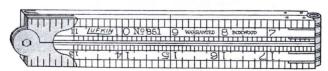
No. **651,** (Old No. **68**)—1 in. wide, Round Joint, Middle Plates, 8 — 16ths, \$2 50 Packed 1 doz. in box. Wt. per doz., 1½ lbs.

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No. 760, (Old No. 63½)— ¾ in. wide, Square Joint, Edge Plates, 8 10 — 16ths, \$4 25 No. 761, (Old No. 63)—1 " " " " " " 8 10 12 16ths, \$4 00 No. 762, (Old No. 72)—1 ¾ in. wide, Square Joint, Edge Plates, with Drafting Scales 8 10 — 16ths, 5 00 Packed ½ doz. in box. Wt. per doz., 1, 1½ and 2 lbs., respectively.

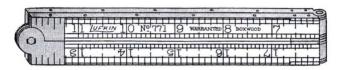


TWO FOOT BOXWOOD RULES

Unbound. Four Fold

	TIT	ИI.	II		I	П	II		I	П	П	I	П	П	II	П	I	I	T.	
ar	1	1	101	KIN	1	0.	No	861		9	WAF	RAN	TED	8	BOX	VOOD		7		1
~ 1			Ш	Ш	Ц.		Ш	Ш	П	Ш	II	Ш	П	Ш	П	Ш	П		4	
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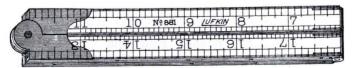
Half Bound. Four Fold



Full Bound. Four Fold



No. 780, (Old No. 62½)— ¾ in. wide, Square Joint, Full Bound, 8 10 12 16ths, \$8 00 No. 781, (Old No. 62)—1 " " " " " " " 8 10 12 16ths, \$8 00 No. 782, (Old No. 72½)—1¾ in. wide, Square Joint, Full Bound, with Drafting Scales 8 10 — 16ths, 9 00 Packed ½ doz. in box. Wt. per doz., 2, ½ and 3 lbs., respectively.



TWO FOOT BOXWOOD RULES

Two Fold

1	10	9 lura	W 8 M5	702 7	CHITTI	ДДДДД ВОЖНООО	цици 5	ЩЩІ 4	3	2 2	1
EI	ĎŢ	git Hilli	9 T	4 T	118	6	ī c	z t	z 8	3 S	s .

		P	er doz.
No. 702,	(Old No.	18)— $1\frac{3}{8}$ in. wide, Square Joint	\$3 75
No. 802,	(Old No.	1)—13/8 " " Arch " 8 10 12 16ths,	4 25
No. 803 T,	(Old No.	4)—1½ " Arch Joint, Bitted, Draft-	
		ing and Octagonal Scales, Extra Thin 8 — — 16ths,	6 50
No. 808,	(Old No.	5)—1½ in. wide, Arch Joint, Full Bound,	
		Drafting and Octagonal Scales 8 10 — 16ths,	9 50
		Packed ½ doz. in box. Wt. per doz., 2 lbs.	
Note-	-Rules No	s. 702 and 802 are particularly adapted for Manual Training v	work.

THREE FOOT BOXWOOD RULES

Unbound. Four Fold

	16	1	11 5 N	1 1 1 193851	1	4	UFKIN	1	3	4	T	2	Щп	1	l I	П	1		Щ
GI	50	, .T	3	1 .	3	3		8	3		. 4	5	. 1 .	3	7,		9	3,	_
医罗马里西亚西亚	ППП		П		I	Ц	Ш	П	Ш	Ш	Ш	П	ШШ	Ц	Ш	Ш	Ш	Ш	

		Per	doz.
No. 3851,	(Old No. $66\frac{1}{2}$)—1 in. wide, Arch Joint, Middle Plates, 8 — —	16ths, \$	6 00
No. 3851 Y,	(Old No. 66)—1 in. wide, Arch Joint, Middle Plates,		
	and Yard Measure — — —		6 00
No. 3861 ,	(Old No. 661/4)—1 in. wide, Arch Joint, Edge Plates. 8 — —	16ths,	7 00
	Packed ½ doz. in box. Wt. per doz., 2 lbs.	-	

Full Bound. Four Fold

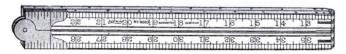
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17	162	UFKIN 15	Nº3881 14	WARRANTED] 3	вохичесо 12	11	10
ST.	, og	SI, I	্ ৪৪	88	₽8	88	98

Per doz.

No. 3881, (Old No. 66¾)—1 in. wide, Arch Joint, Full Bound . . . 8 — — 16ths, \$15 00 Packed ½ doz. in box. Wt. per doz., $3\frac{1}{4}$ lbs.

FOUR FOOT BOXWOOD RULES

Full Bound. Four Fold



Per doz.

No. 4883, (Old No. 94)—1½ in. wide, Arch Joint, Full Bound.... 8 — — 16ths, \$26 00 Packed ½ doz. in box. Wt. per doz., 6 lbs.

BLINDMAN'S RULES

These rules are marked with large and distinct figures, and are especially adapted for use in poorly lighted places, or by persons with poor eyesight.



Two Foot. Four Fold

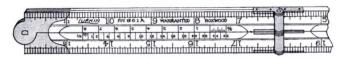
Per doz.

No. **762** B, (Old No. 7)—13% in. wide, Square Joint, Edge Plates, 8 — 16ths, \$11 00

Three Foot. Four Fold

No. **3761** B, (Old No. 8)—1 in. wide, Square Joint, Edge Plates. 8 — — 16ths, 12 00 Packed ½ doz. in box. Wt. per doz., 2 lbs.

ARCHITECT'S RULES With Inside Edges Beveled



Two Foot. Four Fold

BOXWOOD CALIPER RULES

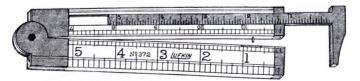
All Caliper Rules are regularly made with caliper Left Hand. They can be furnished with caliper Right Hand, that is, with the caliper slide in the other leg of the rule, the caliper head or end piece being turned the other way, for 25 cents extra per dozen. All caliper slides are graduated outside edge in 32nds, inside edge in 16ths.



Six Inch. Two Fold

Per doz.

No. 171, (Old No. 36)—1 in. wide, Square Joint, Unbound.... 8 10 12 16ths, \$4 50 No. 172, (Old No. 13½)—1¾ in. wide, Square Joint, Bitted.... 8—16ths, 6 50 Packed ½ doz. in box. Wt. per doz., 1 lb.



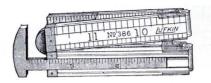
One Foot. Two Fold

Per doz.

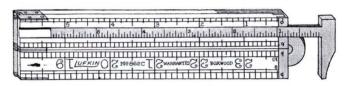
No. 371, (Old No. 35)—1 in. wide, Square Joint, Unbound... 8 10 12 16ths, \$6 20 No. 372, (Old No. 36½)—1¾ in. wide, Square Joint, Unbound... 8 10 12 16ths, 6 50 Packed ½ doz. in box. Wt. per doz., 1¼ and 1¾ lbs., respectively.

BOXWOOD CALIPER RULES

One Foot. Four Fold



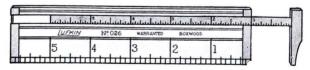
Per doz. No. 378, (Old No. 3)— 5% in. wide, Square Joint, Full Bound, 8 — 16ths, \$12 00 No. 386, (Old No. 32)—1 " Arch Joint, Edge Plates . . 8 10 12 16ths, 7 00 No. 388, (Old No. 32½)—1 " Arch Joint, Full Bound . . 8 10 12 16ths, 10 00 Packed ½ doz. in box. Wt. per doz., 1¼, 1½ and 1¾ lbs., respectively.



Two Foot. Four Fold

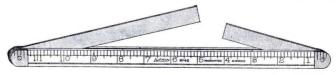
N (011 N	Particular and the second seco	Per doz.
No. 781 C, (Old No. 62 C)—1	in. wide, Square Joint, Full Bound,8 10 12	16ths, \$13, 50
No. 862 C, (Old No. 83 C)—13/8	" Arch Joint, Edge Plates, 8 10 —	16ths 12 00
No. 882 C, (Old No. 76 C)—13/8	" Arch Joint, Full Bound, 8 10 —	16ths 16 00
Packed $\frac{1}{2}$ doz. in box.	Wt. per doz., $2\frac{3}{4}$, $2\frac{3}{4}$, and $3\frac{1}{2}$ lbs., respec	tively.

BOXWOOD CALIPER GAUGES Unbound



P	er doz.
No. 013—1 inch wide, 3 inches long	\$3 50
No 014—1 " " 4 " "	φο ου
10. 014-1 48 — 16ths.	4 00
No. 014—1 " " 4 " " 8 — 16ths, No. 016—1 " " 6 " " 8 — 16ths,	4 50
Packed ½ doz. in box. Wt. per doz., ½, ¾, and 1 lb., respectively.	1 00
rucked /2 doz. in Box. W. per doz., /2, /4, and I ib., respectively.	
NI 004 12/1 11 41 1 1	
No. $024-13$ in. wide, 4 inches long	4 50
No. 026—13/8 " " 6 " " 8 — 16ths,	
178 - 10ths,	5 00
Packed ½ doz. in box. Wt. per doz., 1 and 1¼ lbs., respectively.	
, z	

BOXWOOD SHIP CARPENTER'S BEVELS



COMBINATION RULE AND LEVEL

Patented December 8th, 1914



Closed, Used as a Level



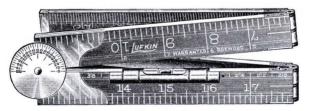
Open, Used as a Rule

The Combination Rule and Level is a new and especially convenient article and is meeting with great favor. It is a three-fold rule, the center fold being fitted with a spirit level. Its uses are many, both as a rule and a level, and will appeal particularly to carpenters, mechanics, etc.

Marked One Side Inches and 8ths, Other Side Inches and 16ths

No. 2062—1 inch wide, 2 feet long, Unbound	
Marked Metric Both Sides to Millimeters	
No. 2062 M—25 mm wide, 60 cm long, Unbound\$16 00	
No. 2072 M—25 mm " 60 cm " Half Bound	
Packed ½ doz. in a box. Wt. per doz., 1¾ lbs.	

COMBINATION RULE, LEVEL AND PROTRACTOR



A two-foot, four-fold Boxwood Rule, fitted with Spirit Level and Protractor. With the aid of the protractor, it is very simple to obtain any degree or angle required. Graduated one side, inches and 8ths, other side, inches and 16ths, with architect's scales. A very handy rule for carpenters, mechanics, etc.

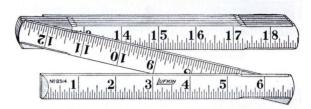
Per doz.

No. 873 L—1½ in. wide, Arch Joint, Half Bound, with Drafting Scales, Level and Protractor...... 8 — — 16ths, 30 00

Packed 1 in a box. Wt. each, 5 oz. and 6 oz., respectively.

Brass Plated Trimmings

Concealed Joints



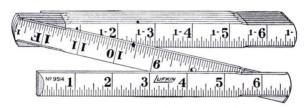
Yellow Enameled

White Enameled

Marked Consecutive Inches

Marked Consecutive Inches

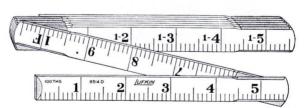
	Wt. per doz.	Per doz.		Wt. per doz.	Per doz.
No. 8512 —2 ft.,	1 lbs.	\$2 00	No. 8612 —2 ft.,	1 lbs.	\$2 20
" 8513 —3 "	1½ "	3 00	" 8613 —3 "	11/2 "	3 30
" 8514 —4 "	2 "	4 00	" 8614—4 "	2 "	4 40
" 8515 —5 "	21/2 "	5 00	" 8615—5 "	21/2 "	5 50
" 8516 —6 "	3 "	6 00	" 8616 —6 "	3 2	6 60
" 8518 —8 "	4 "	8 00	" 8618 —8 "	4 "	8 80



Marked Feet and Inches

Marked Feet and Inches

No. 9513—3 ft., 9514—4 "	Wt. per doz. $1\frac{1}{2}$ lbs. 2	Per doz. \$3 00 4 00	No. 9613 —3 ft., 9614 —4 "	Wt. per doz. $1\frac{1}{2}$ lbs., 2	Per doz. \$3 30 4 40
" 9515 —5 "	$2\frac{1}{2}$ "	5 00	" 9615 —5 "	21/2 "	5 50
" 9516 —6 "	3 "	6 00	" 9616 —6 "	3 " "	6 60
" 9518 —8 "	4 "	8 00	" 9618 —8 "	4 "	8 80



Marked Feet, 10ths and 100ths One Side, Feet and Inches Other Side

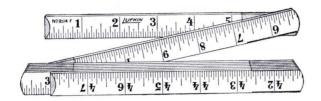
Marked Feet, 10ths and 100ths One Side, Feet'and Inches Other Side

	Wt. per doz.	Per doz.		Wt. per doz.	Per doz
No. 9514 D—4 ft.,	2 lbs.	\$4 00	No. 9614 D—4 ft	2 lbs.	\$4 40
" 9515 D—5 "	21/2 "	5 00	" 9615 D—5 "	21/2 "	550
" 9516 D—6 "	3 "	6 00	" 9616 D-6 "	3 "	6 60

^{2, 3,} and 4 foot rules packed one dozen in box; 5, 6 and 8 foot rules packed $\frac{1}{2}$ dozen in box.

Brass Plated Trimmings

Concealed Joints



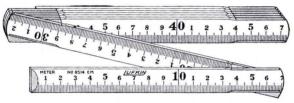
Yellow Enameled

White Enameled

Marked Consecutive Inches With Inside Markings

Marked Co		
With In	side Mar	kings

		Wt. per doz.	Per doz.		Wt. per doz.	Per doz.
No.	8514 F—4 ft.,	2 lbs.	\$4 00	No. 8614 F—4 ft.,	2 lbs.	\$4 40
	9919 L	21/2 "	5 00	" 8615 F—5 "	21/2 "	5 50
44	8516 F—6 "	3 "	6 00	" 8616 F—6 "	3 "	6 60
4.6	8518 F—8 "	4 "	8 00	" 8618 F—8 "	4 "	8 80



Marked Consecutive Inches One Side, Metric to Millimeters Other Side

Marked Consecutive Inches One Side Metric to Millimeters Other Side

		Wt. per doz.	Per doz.		Wt. per doz.	Per doz.
No. 85	12 EM-2 ft	1 lbs.	\$2 00	No. 8612 EM—2 ft.,	1 lbs.	\$2 20
" 85	13 EM-3 "	11/2 "	3 00	" 8613 EM-3 "	11/2 "	3 30
" 85	14 EM-4 "	2 "	4 00	" 8614 EM-4 "	2 "	4 40
	15 EM-5 "	21/2 "	5 00	" 8615 EM-5 "	21/2 "	5 50
	16 EM—6 "	3 " "	6 00	" 8616 EM—6 "	3 "	6 60

Marked Metric to Millimeters One Side, Consecutive Inches Other Side

Marked Metric to Millimeters One Side, Consecutive Inches Other Side

	Wt.								Wt.										
						Per	doz.	Per d	oz.									Per d	oz.
No.	7511	ME- 5	fold.	1	meter,	13/4	1bs.	\$3	20			ME 5		1:	meter,	13/4		\$3	50
44	7511	ME- 6	**	1	**	13/4		3	40			ME-6		1		13/4			80
4.4	7511	ME-10		1	**	13/4		4	80			ME-10		1		13/4	"		30
44	7512	ME-10		2		31/4	"	6	40			ME-10		2		31/4	"		00
- 6.6	7512	ME—12	"	2		31/4		6	80	"	7612	ME—12		2	**	31/4	"	7	60

Marked Consecutive Inches One Side, Metric and Burgos Other Side

N

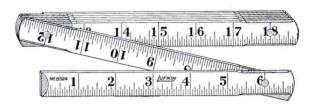
Marked Consecutive Inches One Side, Metric and Burgos Other Side

						V	Vt.								Wt.	
						Per	doz.	Per d	oz.						Per doz.	Per doz.
No.	7511	MEB- 5	fold,	1 n	neter,	13/4	1bs.	\$3	50			MEB- 5			13/4 lbs.	\$ 3 85
	7511	MEB- 6	. "	1		13/4		3	80			MEB-6		1 "	13/4 "	4 20
"	7511	MEB-10) "	1		13/4	4.6	5	30		7611	MEB-10		1 "	13/4 "	5 85
4 4	7512	MEB-10) "	2	"	31/4	"	7	00		7612	MEB-10	**	2 "	31/4 "	7 70
4.6	7512	MEB-12	2 "	2	"	31/4	**	7	60		7612	MEB-12		2 "	31/4 "	8 40
4.4	8514	EMB- 8	3 "	4 f	eet	2		4	40	**	8614	EMB- 8	"	4 feet	2 "	4 85

Note—In ordering rules with Metric measurements it is absolutely necessary to state number of folds per rule, either 5, 6, 8, 10 or 12 fold.

All 2, 3 and 4 foot rules and 1 meter rules are packed one dozen in a box; all 5, 6 and 8 foot and 2 meter rules are packed $\frac{1}{2}$ dozen in a box.

Brass Plated Trimmings
Rivet Joints



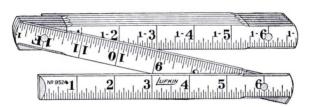
Yellow Enameled

White Enameled

Marked Consecutive Inches

Marked Consecutive Inches

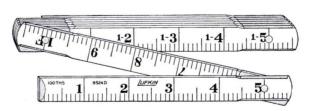
	Wt. per doz.	Per doz.		Wt. per doz.	Per doz.
No. 8522 —2 ft.,	1 lbs.	\$2 00	No. 8622 —2 ft.,	1 lbs.	\$2 20
" 8523 —3 "	11/2 "	3 00	" 8623 —3 "	$1\frac{1}{2}$ "	3 30
" 8524 —4 "	2 "	4 00	" 8624 —4 "	2 "	4 40
" 8525 —5 "	2½ "	5 00	" 8625 —5 "	21/2 "	5 50
" 8526 —6 "	3 "	6 00	" 8626 —6 "	3 "	6 60
" 8528 —8 "	4 "	8 00	" 8628 —8 "	4 "	8 80



Marked Feet and Inches

Marked Feet and Inches

	Wt. per doz.	Per doz.		Wt. per doz.	Per doz.
No. 9523—3 ft.,	$1\frac{1}{2}$ lbs.	\$3 00	No. 9623 —3 ft.,	$1\frac{1}{2}$ lbs.	\$3 30
" 9524 —4 "	2 "	4 00	" 9624 —4 "	2 "	4 40
" 9525 —5 "	21/2 "	5 00	" 9625 —5 "	21/2 "	5 50
" 9526 —6 "	3 "	6 00	" 9626 —6 "	3 "	6 60
" 9528 —8 "	4 "	8 00	" 9628—8 "	4 "	8 80



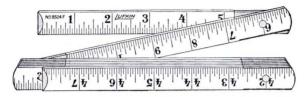
Marked Feet, 10ths and 100ths One Side, Marked Feet, 10ths and 100ths One Side, Feet and Inches Other Side

	Wt. per doz.	Per doz.		Wt. per doz.	Per doz.
No. 9524 D-4 ft.,	2 lbs.	\$4 00	No. 9624 D—4 ft.,	2 lbs.	\$4 40
" 9525 D—5 "	21/2 "	5 00	" 9625 D—5 "	21/2 "	5 50
" 9526 D—6 "	3 "	6 00	" 9626 D—6 "	3 "	6 60

^{2, 3} and 4 foot rules packed one dozen in box; 5, 6 and 8 foot rules packed $\frac{1}{2}$ dozen in box.

Brass Plated Trimmings

Rivet Joints



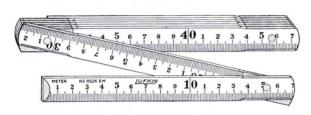
Yellow Enameled

Marked Consecutive Inches With Inside Markings

White Enameled

Marked Consecutive Inches With Inside Markings

	Wt. per doz.	Per doz.		Wt. per doz.	Per doz.
No. 8524 F-4 ft.,	2 lbs.	\$4 00	No. 8624 F-4 ft.,	2 lbs.	\$4 40
" 8525 F—5 "	21/2 "	5 00	" 8625 F—5 "	21/2 "	5 50
" 8526 F-6 "	3 "	6 00	" 8626 F—6 "	3 "	6 60
" 8528 F-8 "	4 "	8 00	" 8628 F—8 "	4 ''	8 80



Marked Consecutive Inches One Side, Metric to Millimeters Other Side

Marked	Con	secutive	Inc	hes	On	e Side,
Metri	c to	Millime	ters	Oth	ıer	Side

	Wt. per doz.	Per doz.		Wt. per doz.	Per doz.
o. 8522 EM—2 ft.,	1 lbs.	\$2 00	No. 8622 EM-2 ft.,	1 lbs.	\$2 20
* 8523 EM-3 **	11/2 "	3 00	" 8623 EM—3 "	11/2 "	3 30
' 8524 EM-4 "	2 "	4 00	" 8624 EM—4 "	2 "	4 40
' 8525 EM—5 "	21/2 "	5 00	" 8625 EM-5 "	21/2 "	5 50
' 950C PM 6 "	3 " "	6 00	" 8626 EM-6 "	3 "	6 60

Marked Metric to Millimeters One Side Consecutive Inches Other Side

TX7+

Marked Metric to Millimeters One Side, Consecutive Inches Other Side

							doz.	Per d	oz.						Per	loz.	Per d	oz.
		ME- 5		1	meter,		lbs.		20			ME- 5	1 1	neter,	13/4	lbs.		50 80
		ME-6 ME-10		1	**	$\frac{13_4}{13_4}$			40 80			ME-6 ME-10	1	**	13/4	"	5	30
4.6	7522	ME-10		2	"	314	"	6	40	"		ME-10	2	"	31/4	"		00 60
"	7522	ME—12	"	2		31/4		6	80		7622	ME—12	4		0/4		,	00

Marked Consecutive Inches One Side, Metric and Burgos Other Side

Marked Consecutive Inches One Side, Metric and Burgos Other Side

				0							
					Wt.					Wt.	
					Per doz.	Per doz.				Per doz.	Per doz.
No.	7521	MEB- 5	fold.	1 meter.	13/4 lbs.	\$3 50		MEB- 5 fold		13/4 lbs.	\$3 85
		MEB- 6		1 "	134 "	3 80		MEB— 6 "	1 "	13/4 "	4 20
4.4	7521	MEB-10		1 "	13/4 "	5 30		MEB-10 "	1 "	13/4 "	5 85
4.4	7522	MEB-10		2 "	31/4 "	7 00		MEB-10 "	2 "	314 "	7 70
	7522	MEB-12		2 "	31/4 "	7 60		MEB-12	2	31/4 "	8 40
4.4	8524	EMB- 8		4 feet	2 "	4 40	" 8624 E	EMB— 8 "	4 feet	2	4 85

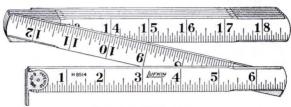
Note—In ordering rules with Metric measurements it is absolutely necessary to state number of folds per rule, either 5, 6, 8, 10 or 12 fold.

All 2, 3 and 4 foot rules and 1 meter rules are packed one dozen in a box; all 5, 6 and 8 foot and 2 meter rules are packed $\frac{1}{2}$ dozen in a box.

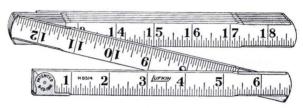
Brass Plated Trimmings

With Folding Hook

(Patented June 13, 1916)



Showing Hook Open



Showing Hook Closed

Just the thing for taking measurements out of arms reach, and handy for taking almost any measurement. A small, substantial hook fitted to the first end of Spring Joint Rules, so attached that with but a twist of the finger will fold up and remain flush with the edge of the rule, making it in appearance and for use same as ordinary rules without hook. Zero point falls at inside of hook when open, at extreme end of rule same as regular rules when hook is closed.

CONCEALED JOINTS

Yellow Enameled

White Enameled

	Marked	Consecutive	Inches
--	--------	-------------	--------

Marked Consecutive Inches

	Wt. per doz.	Per doz.		Wt. per doz.	Per doz.
No. H 8514 —4 ft.,	2 1bs.	\$5 35	No. H 8614 —4 ft.,	2 lbs.	\$5 75
" H 8515—5 "	21/2 "	6 35	" H 8615 —5 "	21/2 "	6 85
" H 8516—6 "	3 "	7 35	" H 8616—6 "	3 " "	7 95
" H 8518-8 "	4 "	9 35	" H 8618-8 "	4 "	10 15

RIVET JOINTS

Yellow Enameled

White Enameled

Marked Con	secutive	Inches
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Marked Consecutive Inches

		Wt. per doz.	Per doz.		Wt. per doz.	Per doz.
No.	H 8524—4 ft.,	2 lbs.	\$5 35	No. H 8624 —4 ft.,	2 lbs.	\$5 75
"	H 8525—5 "	$2\frac{1}{2}$ "	6 35	" H 8625 —5 "	21/2 "	6 85
"	H 8526 —6 "	3 "	7 35	" H 8626 —6 "	3 "	7 95
"	H 8528 —8 "	4 "	9 35	" H 8628—8 "	4 ''	10 15

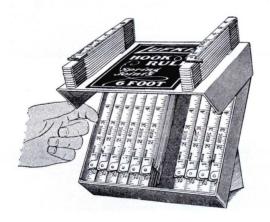
⁴ foot rules packed one dozen in box; 5, 6 and 8 foot rules packed one-half dozen in box.

With Folding Hook

Packed in Display Boxes



Closed



Open for Removing Rule

We are prepared to furnish No. H-8526 Hook Rule, described on opposite page, packed in attractive display boxes of one dozen each without extra charge.

Note—Unless No. H-8526 Hook Rules are specified packed in display boxes they will be sent packed in regular boxes of one-half dozen each.

Per doz.

WOOD DESK RULES



Figure 1



Figure 2



Figure 3

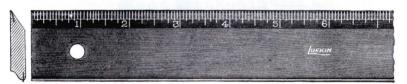


Figure 4



Figure 5

WOOD DESK RULES

Our Desk Rules are a strictly high grade article, nicely finished in natural color, highly polished, and should not be compared with the many cheaper and inferior grades on the market.

MAPLE

Graduated Inches and 16ths

No. 7101 —¾ in. wide x ¼ in. th Length, 12 inches.	9	, 0	Per gr	oss, \$7.20
Wt. per gross,	12 in.	15 in. 24 lbs.	18 in. 30 lbs.	24 in. 38 lbs. 24 00
Per gross, No. 7103—13% in. wide x 156 in. t Length, Wt. per gross, Per gross,	hick. One Inlai 12 in. 20 lbs.	d Brass Edge as 15 in. 26 lbs.	18 in.	24 in. 40 lbs. 48 00
No. 7104 —13% in. wide x ½ in. the Length, Wt. per gross, Per gross,	hick. Two Inlanding 12 in. 20 lbs.	id Brass Edges a 15 in. 26 lbs.	as Figure 4.	24 in. 40 lbs. 55 80
No. 7105 —13% in. wide x $\frac{5}{16}$ in. the Length, Wt. per gross, Per gross,	12 in. 24 lbs.	15 in. 30 lbs.	18 in. 36 lbs.	24 in. 48 lbs. 55 80

BOXWOOD

Graduated Inches and 16ths

No. 7201	$-\frac{3}{4}$ in. wide x $\frac{1}{8}$ in. thic Length, 12 inches.	k.	Plain Wt.	Edge, as per gross	Figu.	re 1. bs.	Р	er gross, \$16.80
No. 7202	$-1\frac{3}{8}$ in. wide x $\frac{5}{16}$ in. this	ck.	Plair	n Edge as	Figu	re 2.		
	Length, Wt. per doz., Per doz.,	12 2 \$4	in. 1bs. 80	$2\frac{15}{2}$	in. 1bs. 40	18 3 6	in. 1bs. 00	24 in. 4 lbs. 9 60
No. 7203	$-1\frac{3}{8}$ in. wide x $\frac{5}{16}$ in. this							
	Length, Wt. per doz., Per doz.,	12 2 \$5	in. 1bs. 40	$2\frac{15}{2\frac{1}{2}}$	in. 1bs. 20	18 3 9	in. lbs. 00	24 in. 4 lbs. 12 60
No. 7204	-13/8 in. wide x 15 in. this	ck.	Two	Inlaid Br	ass E	dges as Fi	gure	4.
	Length, Wt. per doz., Per doz.,	12 2 \$6	in. 1bs. 00	$2\frac{15}{2}$	in. 1bs. 80	18 3 9	in. 1bs. 60	24 in. 4 lbs. 13 20
No. 7205	-13/8 in. wide x 15/6 in. this	ck.	One	Brass Ov	erlay	Edge as F	igure	5.
	Length, Wt. per doz., Per doz.,	12 2 \$6	in. 1bs. 0 0	$2\frac{15}{2\frac{3}{4}}$	in. 1bs. 80	18 31/4 9	in. 1bs. 60	24 in. 4½ lbs. 13 20

All above rules are packed one dozen in box, except Nos. 7101 and 7201 which are packed 2 dozen in box.

EXTENSION RULES



Our Extension Rules are especially adapted for quickly and accurately measuring the distance between fixed points (floor and ceiling, window frames, etc.) They are high grade, first class, and the best and most convenient of their kind made

Note—Extension Rules are regularly graduated feet, inches and 8ths, but can be furnished graduated in consecutive inches without additional charge if so ordered.

In Two Sections, with Set Screws

Fitted with steel springs to keep the sliding joints at any desired point. Graduated feet, inches and 8ths.

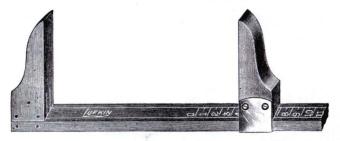
																	Wt. per	r doz.	Per d	OZ.
No.	7162	-N	Iaple,	2	to	4	feet	t.									 51/4	lbs.	\$18	00
"	71621	2	ii .	21/2	"	5	"										 6	4.4	19	80
"	7163	_	"	3	"	6	"										 63/4	"	21	60
"	7164		"	4	"	8	"										 9	"	25	20
"	7165		"	5	"	10	"										 12	"	30	00
"	7166		"	6	"	12	"										 15	"	36	00
"	7168		"	8	"	16	"										 $18\frac{3}{4}$	"	45	00

In Three Sections, with Set Screws

For convenience in measuring, the three section rules are graduated on one side only in feet, inches and 8ths. Fitted with our patent locking device, which automatically holds the sliding joints in their proper place, enabling one to instantly arrive at the correct measurement and avoiding all the confusion incident to other rules of this class.

																		Wt. I	эe	er	doz.	Per d	oz.
	7172-N						t.				 							9		1	bs.	\$42	00
"	7173—		O		9						 							15	3/4	í	"	45	00
"	7174	"	4	"	12	"					 			 				20	1/2	ź	"	54	00
"	7175—	"	5	"	15	"					 			 	•			24			"	66	00
4.6	7176	"	6	"	18	"					 							29	1/4	í	"	81	00

SHOEMAKER'S SIZE STICKS



						Wt. per gross	Per gross
	8120—Maple,	with	Tin	Trimmings		23 lbs.	\$42 00
"	8121— "	"	Brass	"		24 "	45 00
44	8221—Boxwood,	"	"	"		45 "	75 00
"	8223— "	Fold	ing, for	r pocket use	2	26 "	120 00

Don don

16 80

GAUGING RODS



MAPLE

With Brass Point

						wt. per	doz.	I CI U	OZ.
Mo	7191_2	ft	120	gallons	1	$2\frac{1}{4}$	lbs.	\$ 6	60
INO.	1101-0	10.,	120	ganoni		23/	44	Ω	00
4 6	7182-31/2	"	200	"		4/4		J	00
	1104-072					0	66	11	40
66	7183 - 4	"	300	**		0		11	40
	1103-4				TTT . (T) 1.1	9	44	16	80
66	7101 1	"	300	46	with regular Wantage Tables	3		10	00

BOXWOOD

With Steel Pointed Brass Tips, Ivory Face, Brass Back

Extra Fine Finish	Per doz.
No. 7284—3 ft., 120 gallons, with regular Wantage Tables	
Wt. per doz., $3\frac{3}{4}$ lbs.	

The above furnished with "Imperial Gallon" measurements when desired.

The capacity of a barrel is ascertained by inserting the Gauge Rod through the bung hole into each end, reading the rod across the center of the bung hole for both insertions, and then taking the average of the two readings. If, for example, one reading shows 50 gallons and the other 48 gallons, the average, viz., 49 gallons, would be the correct measurement of the barrel when filled to the bung hole.

WANTAGE RODS



7287—Boxwood,

8

12

The Wantage Rod is slowly inserted into the barrel until the brass angle rests under the staves at the bung hole. If, for example, this rod is wet as far as 10, it shows a shortage of ten gallons.

FREIGHT RULES



Freight Rules are especially designed for measuring packages for export and import shipments. They will, however, be found convenient and useful for numerous other purposes.

Graduated feet, inches and quarters on two sides and top edge.

Two inch cast brass hook fitted on first end.

	W. C. per doz.	
No. 7155-5 ft., 1 x 5/8 inch Polished Maple	14 lbs.	\$24 00
" 7156—6 " 1 x 5% " " "	16 "	30 00

SHRINKAGE RULES

For Pattern Makers



Our shrinkage rules are strictly high grade in every respect. Guaranteed accurate, and the finest shrinkage rules made, and should not be compared with the cheaper and inferior rules on the market.

Made of Highly Finished Boxwood, 11/2 x 1/8 inch, Brass Capped.

Graduated 8ths One Side, 16ths on the Other Side

											P	er doze	n
No.	8201 —Ex	treme	e length	241/8	inches,	Shrinkage	1 6	inch	per	foot.		\$15 0	00
"	8202-	"	u	$24\frac{2}{12}$	u	u	12	"	"	" .		15 0	00
"	8203-	"	u	24 2	u	"	10	"	"	" .		15 0	00
u	8204	"	"	$24\frac{3}{16}$	"	"	$\frac{3}{32}$	"	"	" .		15 0	00
"	8205—	u	"	241/4	"	u	1/8	"	u	" .		15 0	00
"	8206-	"	a	243/8	и	и	3	u	u	" .		15 0	00
"	8207-	u	"	$24\frac{1}{2}$	u	u	1/4	"	u	" .		15 0	00
u	8208	"	u	$24\frac{5}{8}$	u	u	5	"	u	" .		15 0	00
u	8209	u	"	$24\frac{3}{4}$	"	u	3/8	u	"	" .		15 0	00
"	8251—	u	"	25	u	u	$\frac{1}{2}$	"	"	" .		16 2	0
"	8252-	"	"	$25\frac{1}{2}$	u	u	$\frac{3}{4}$	"	u	" .		16 2	0
"	8253—	"	"	$25\frac{3}{4}$	u	u	7/8	u	"	" .		18 0	00
u	8254—	"	u	25 7/8	u	u	1 5 1 6	"	"	" .		18 0	00
u	8255—	u	u	26	u	u	1	u	u	" .		18 0	0

Graduated 8ths, 10ths, 12ths and 16ths

											Per do	zen
No.	8211 —E	xtrem	e length	241/8	inches,	Shrinkage	16	inch	per	foot	\$15	00
"	8212-	"	u	$24\frac{2}{12}$	"	"	12	"	"	«	15	00
"	8213	u	"	$24\frac{2}{10}$	"	"	10	"	u	"		00
"	8214-	u	"	2413	u	"	3 2	u	u	"	15	00
u	8215—	"	"	241/4	"	«	1/8	"	"	"	15	00
"	8216—	«	"	243/8	"	"	3	"	"	"		00
«	8217	u	"	241/2	u	"	1/4	u	"	"	. 15	00
u	8218—	u	u	$24\frac{5}{8}$	"	"	5 1 6	"	"	"	. 15	00

Wt. per doz., 21/4 lbs.

Packed one-half dozen in box.

FLAT WOOD RULES

Polished

For Saddlers, Mechanics, Etc.



Graduated One Side in Inches and 8ths, Other Side in Inches and 16ths, Both Edges

										Wt. per	doz.	Per de	oz.
No.	7231	-24	inch,	1½ x 3	inch	Boxwood,	Brass	Cappe	d	2½ 1b	os.	\$11	70
u	7131	24	u	ш	u u	Maple,	··	"		21/4 "		3	60
u	7132-	36	u	ш	" "	u	"	"		31/4 "	:	7	80
u	7133	-48	"	" 1/2	í "	u	"	"		5½ "	:	11	20
a	7134	60	"	u		"	"	"		63/4 "	•	18	00
"	7135	— 72	"	u		"	"	"		8 "	4	27	00
"	72311	2 —24	"	"	<u>3</u> "	Boxwood	, Brass	Bound	1	33/4 "	4	18	00
"	7131	½ —24	"	u		Maple,	u	"		31/4 "	•	13	80
u	71321	∕ ₂ —36	"	"	" "	u	u	u		51/4 "	4	24	00
u	7133 1	∕ ₂ —48	u	" 1	4 "	u	"	"		9 '		36	00
u	7134	2 —60	"	u	u u	ш	"	"		101/2	u.	54	00
"	7135	∕ ₂ —72	"	"	" "	u	"	"		131/2	ii	72	00

FLAT WOOD RULES

Graduated Inches and 8ths on Top Edge of Both Sides

								Wt. per doz.	Per doz.
No.	7031 —24	inch,	1¼ x	5 incl	n Maple	, Plain	Ends	 $1\frac{3}{4}$ lbs.	\$1 60
"	7032 —36	"	"	u	u u	u	u	 23/4 "	1 90

YARD STICKS

Polished



Graduated One Side, Inches and 8ths; Other Side Fractions of Yards

		Wt. per doz.	Per doz
No.	7121 — 1 x ¼ inch, Maple, Plain	23/4 lbs.	\$1 90
u	7122 — 1 x ¼ inch, Maple, Tipped	23/4 "	3 10
"	7123 — 1 x ¼ inch, Maple, Capped	23/4 "	3 70
"	7422—7/8 x 3/16 inch, Hickory, Capped, Rounded Edges, Flexible	21/2 "	4 00
"	7423 — 1 x ½ inch, Hickory, Tipped	23/4 "	3 40
"	7424 — 1 x ½ inch, Hickory, Capped	23/4 "	4 00

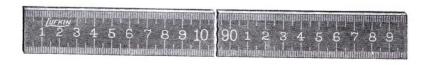


Graduated Both Sides, Inches and 8ths bottom Edge, Fractions of Yards Top Edge

					Wt. per doz.	Per doz.
No.	7129—1½ x	$\frac{5}{6}$ inch,	Maple,	Capped	41/4 lbs.	\$5 40
"	7429 —1½ x ₁	5 "	Hickory,	Capped	41/4 "	6 00
"	7115—1½ x 1	3 "	Maple,	Plain	23/4 "	2 50
u	7116 —1½ x 1			Tipped		3 70

METER STICKS

Polished

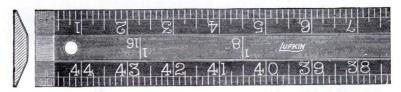


Graduated Both Sides, One Side Upper Edge Only, Inches and 8ths; Other Side, Both Edges to Millimeters

							Wt. per doz.	Per doz.	
No.	7111 —1 m	neter,	$1 \times \frac{5}{16}$	inch,	Maple,	Plain	3 lbs.	\$3 25	
u	7112 —1	u	$1 \times \frac{5}{16}$	u	u	Tipped	3 "	4 50	

BEVELED YARD STICKS

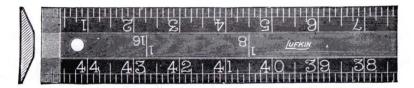
Polished



Double Beveled Yard Sticks, Graduated One Side, Both Bevels, in Inches and 8ths,
Fractions of Yards in Center

				Fractio	ons of Yards in Center	
						Per dozen
No.	7124-11/2	X 15	inch,	Maple,	Plain	. \$4 80
"	7125-11/2	$\frac{5}{16}$	"	"	Tipped	. 6 00
	Wt. I	oer d	loz., 3	½ 1bs.		

YARD AND QUARTER STICKS



Double Beveled, Graduated One Side, Both Bevels, in Inches and 8ths, Fractions of

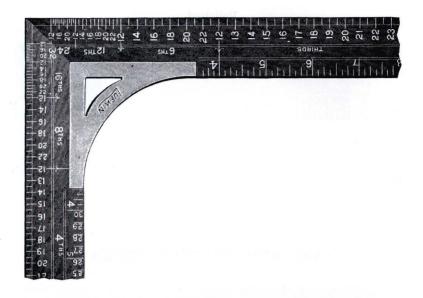
				Tarus III Center			
					Per		
No.	7126 —1½	X 15	inch, Maple,	Plain		\$7	20
"	7127 —1½	X 15	u u	Tipped		10	80
			loz., $4\frac{1}{2}$ lbs.				
No.	7128 —1½	X 15	inch, Maple,	Jointed, two sections		30	00
	Wt.	per d	loz., 63/ 1bs.				

CURVE STICKS



		Twenty-four Inches Long, Graduated Inches and 8ths $$\operatorname{Per}$$	doz	zen
No.	8151 —Maple	e, Plain Ends	\$3	60
K	8152— "	Brass Tipped Ends	6	00
	Wt. p	er doz., 1¼ lbs.		

TAILOR'S AND DRESSMAKER'S SQUARES

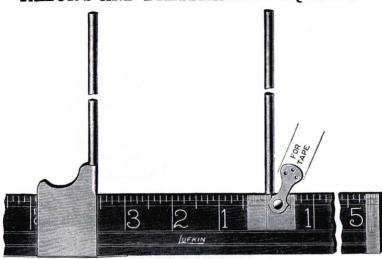


Squares designated "Regular Graduations" are graduated on the short arm in 32nds, 16ths, 8ths, 4ths and halves. Long arm, 24ths, 12ths, 6ths, 3rds and two-thirds.

Squares designated "Reverse Graduations" are graduated on the long arm in 32nds, 16ths, 8ths, 4ths and halves, and on the short arm, 24ths, 12ths, 6ths, 3rds and two-thirds. Above graduations appear on one side of square, other side graduated inches and 8ths.

										Pe	er doz	zen
No.	8130 —14 2	24	inches.	Maple.	Plain	Ends,		Regular	Grad'ns		\$17	-
"	8132 —14 2		"	"		Tipped	Ends	_	"		18	
"	8134 —14 2		"	u		Ends.	Dilus,	Reverse	u			
"			"	"			T 1	Keverse "	"	• • • • •		
	8135 —14 2				Brass	Tipped	Ends,	••			23	40
		-	doz., 2									
"	8231 —12 x	24	inches,	Boxwood,	"	"	"	Regular	"		23	40
"	8232 —14 2	24	"	"	"	"	"	"	u		24	60
"	8233 —12 2	24	"	u	"	"	"	Reverse	"		24	60
"	8235 —14 2	24	"	ш	u	"	"	"	u		25	
			1 0	1 / 11							23	80
	VV t.	per	doz., 2	4 IDS.								
	Abo	ove s	squares	are all pro	vided	with Br	ass Cu	rve Arch	or Brad	ce.		
No.	8236 —6 x	12 I	Boxwood	l, Brass Ti	pped I	Ends.	Inches	and frac	tions on	e side;		
				ions other s								
	cap	acity	of san	are 12 x 24	inche	25			Per d	ozen	\$24	00
	Wt.	per	doz., 3	í lbs.	LINCIA				1 C1 C	02011	Ψ2 -	00
		•		•								
No.	8238 —14 x											
	bras	ss b	atton, w	which sets f	lush w	ith the	wood.	Regula	r gradu	ations.		
											\$44	40
			doz., 5		0 10 110 11 15 1						W-1	
		-										
		For	descrip	tions and p	prices	of Tailo	r's Tap	pes see p	age 42.			

TAILOR'S AND DRESSMAKER'S SQUARES



Measuring Sq	uare	with	Sliding	Brass	Arm,	24-inch	Bar,	Graduated	Inches	and	8ths,
				9-in	ch Bra	ss Arms					

No.	8140 —9 x 24 inches, 8240 —9 x 24 "	Boxwood,	Brass "	Tipped	Ends	Pe	r dozen	\$29 34	40 20	
	Wt. per doz	$5\frac{1}{4}$ lbs.								

Measuring Square with Sliding Boxwood Arm and Bar, Flexible Brass Strip on Reverse Side. Graduated Inches and 8ths

MEASURING SQUARES

Graduated Inches and 8ths Only, Both Sides

			Per dozen
No. 8142—14 x 24 inches, Maple, with Brace,	Plain	Ends	\$15 00
No. 8142 —14 x 24 inches, Maple, with Brace, " 8143 —14 x 24 " " without Brace,	"	"	12 00
Wt. per doz., 2 lbs.			
No. 8145—10 x 18 inches, Maple, Pantaloon, Curved	, "	"	13 20
Wt. per doz., $2\frac{1}{2}$ lbs.	,,	"	
No. 8246—6 x 10 inches, Boxwood Arm Square,			
marked inches and 16ths both sides			9 00
Wt. per doz. 1/2 lb.			

METRIC SQUARES

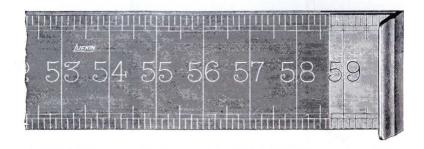
30 x 60 Centimeters. Graduated Both Sides in Decimeters, Centimeters and Half-Centimeters

No.	8147—Maple, with Brace, 8148— " "	Plain E	nds	 Per	dozen	\$18	00
"	8148— " " "	Tipped	Ends	 **	**	19	20
	Wt. per doz., 2 lbs. 8248—Boxwood, with Brace,					24	00
For	Wt. per doz., 3 lbs. one Beveled Edge, add			 "	"	1	50

For descriptions and prices of Tailor's Tapes see page 42.

GLASS CUTTER'S RULES

With Brass Flange or Lip



Graduated Both Sides and Both Edges in Consecutive Inches and 8ths

	POLISHED MAPLE																				
																			Pe	r doz	zen
No.	7141—	36 inc	ches,	$1\frac{3}{4}$	x 1/4	inch,	Wt.	per	doz.,	7	1bs	S.,				 	 	٠.	 •	\$29	40
"	7142 4	18	u	$1\frac{3}{4}$	x 1/4	u	"	"	"	9	"					 	 	٠.		41	40
"	7143—	50	"	$2\frac{1}{2}$	x 1/4	u	"	"	"	15	"					 	 			53	40
"	7144 7	72	"	$2\frac{1}{2}$	x 1/4	u	"	"	"	17	"					 	 			64	80
«	7145— 8	84	"	3	x ½	"	u	"	"	22	"	٠,				 	 			82	80
"	7146—	96	"	3	x ½	··	"	"	u	27	"					 	 			100	80
"	7147 —10	08	"	$3\frac{1}{2}$	x 1/4	"	u	"	"	34	u	٠.			:	 	 			118	20
"	7148 —12	20	"	31/2	x 1/4	"	u	"	"	37	u					 	 			136	20
"	7149 —14	14	"	$3\frac{1}{2}$	x 3/8	"	··	"	"	65	"	٠.				 	 			204	00

GLAZIERS' RULES

Flat, Without Flange

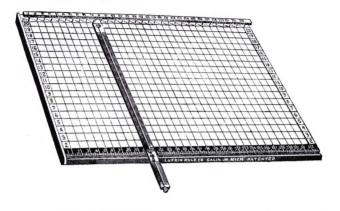
Graduated one side in consecutive inches and 8ths, same as glass cutters' rules. Other side, bottom edge in consecutive inches and 8ths; top edge in feet and fractions of feet. Brass tipped.

POLISHED MAPLE Per dozen No. 7136—36 inches, 1½ x ¼ inch, Wt. per doz., 5 lbs...... \$8 40 13/4 x 1/4 " 7 " 7137-48 14 75 13/4 x 1/4 " **7138**—60 22 20 13/4 x 1/4 " **7139**—72 " 10 " 29 40 2 x ½ " 7140-84 40 80

THE "PERFECTION" GLASS BOARD

(Trade Mark Registered)

With Improved Adjustable Straight Edge





(Lower side of straight edge)

(Upper side of straight edge)

The "Perfection" Glass Board is a modern device which enables a merchant to cut glass mathematically accurate, in inches or fractions of inches as desired. The board is made of narrow strips of well seasoned lumber, is ruled both ways in even inches, and has a steel rule at the front side graduated in inches and 8ths. The straight edge is fitted with a very simple device by which it can be moved forward or backward, and can be fixed by means of a set screw at any point desired. When several lights of glass of the same size are to be cut, the screw once set, every light will be exactly the same size.

An indispensable article to all dealers in Window Glass, and will save its cost in a short time.

Size of Board	Weight each, lbs.	Price each
24 x 36	36	\$11 00
30 x 48	58	13 50
36 x 54	72	16 00
42 x 60	100	19 00
48 x 72	. 136	24 00

Other Sizes Made to Order

Each Board packed securely to protect it from injury in transit.

SPRING STEEL BOARD RULES

Nickel Plated and Lacquered



A neat, light and practically indestructible Board Rule. Made of the best quality of tempered spring steel, it will bend to the board, and when released return exactly straight. It is nearly as light as a wooden rule, weighing less than 16 ounces. It is provided with a wood handle, fitting the hand nicely, and with a leather slide for handling the rule at any part of the blade. The head is of steel, being the same as used in our best hickory rules. The rule is nickel plated and lacquered to prevent rusting. The surface of the rule is frosted, taking away the bright surface which is so objectionable in other steel rules. The figures are large and black, and the divisions are a distinct black dot, easily seen.

No. 51 —3 Tier, $3\frac{1}{2}$ ft.,	Inspectors'	Rule,	1	in.	wideP	er	dozen	\$42	00
No. 52 —3 Tier, 3 "	Board	"	1	"		"	"	36	
No. $52\frac{1}{2}$ —3 Tier, $2\frac{1}{2}$ "	Sorting	"	1	"		"	"	33	00
Wt. per dozen,	15 lbs.								

Above three rules are marked one side to measure 8, 10 and 18 ft., opposite side 12, 14, 16 ft., or 18, 20 and 22 ft.

In Ordering Always State Whether You Want Rules Marked 8 to 18, or 12 to 22 ft.

No. 58 —4 Tier, 3 ft.,	Board Rule,	11/4 in.	wide	Per dozen	\$39 00
No. 58½—4 Tier, 2½ "	Sorting Rule,	11/4 "			36 00
Wt. per dozen	18 1hs				

Above two rules are marked to measure 8, 10, 20, 22 ft., and 12, 14, 16, 18 ft., or 9, 11, 13, 15 ft., and 12, 10, 14, 16 ft.

In Ordering Always State Whether You Want Rules Marked 8 to 22, or 9 to 16 ft.

Note—Oval Heads as described on page 99 will be furnished on above rules without extra charge if so ordered.

BILTMORE OR FOREST CRUISER STICKS

(Merritt Hypsometer)



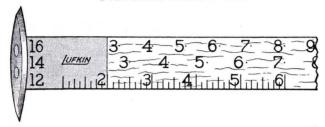
Gives Diameter and Height of Standing Trees

This stick was designed and is used extensively by the United States Forest Service in reconnaissance estimates of timber tracts. In addition to diameter and height scales it bears a table of Decimal C Log Scale values for 16 foot logs and a tier of regular inch markings.

Made of highly finished maple, $37\frac{13}{16}$ inches long, $\frac{1}{2}$ inch thick, 1 inch wide, with one sloping face. Both ends are fitted with heavy cast brass ferrule.

Note-For Tree Tapes see page 13.

Burnt Figures
Oval Head Board Rules



The oval shaped top or cap is of the best tempered steel and is brazed on to an extra heavy brass shoulder. Unless otherwise specified, this style of head will be supplied on all Board Rules except No. 4, which has a socket steel square head.

All of Our Board and Log Rules are Made of the Very Best Selected Second-Growth White Hickory, and Every Rule is Carefully Inspected and Tested Before Being Shipped.

Note—The rules listed on this page are marked on one side to measure 12, 14 and 16 ft., opposite side 8, 10 and 18 ft., or 18, 20 and 22 ft.

In Ordering Always State Whether You Want Rules Marked 8 to 18 or 12 to 22 ft. For All Special Rules an Extra Price Will be Charged.

No. 1 —3 Tier, 1½ in. wide, Inspector's Board Rule. Has extra heavy brazed head (steel caps and 2 in. brass shoulders).

Figured 36 inches with 6 in. handle. Full length 3½ ft....Per dozen \$27 00 Wt. per dozen, 7½ lbs.

No. 2 —3 Tier, 11% in. wide, Board Rule. Has extra heavy brazed head (steel caps and 2 in. brass shoulders). We recommend this rule for regular yard work.

Figured 30 inches, with 6 in. handle. Full length 3 ft.....Per dozen \$25 00 Wt. per dozen, 6 lbs.

No. 2½—3 Tier, 1½ in. wide, Sorting Rule. Has extra heavy brazed head (steel caps and 2 in. brass shoulders).

Figured 24 inches, with 6 in. handle. Full length, 2½ ft...Per dozen \$24 00 Wt. per dozen, 6 lbs.

NARROW RULES

No. 1 N —3 Tier, 1 in. wide, Inspector's Board Rule. Has extra heavy brazed head (steel caps and 2 in. brass shoulders).

Figured 36 inches with 6 in. handle. Full length $3\frac{1}{2}$ ft...Per dozen \$27 00 Wt. per dozen, $6\frac{1}{2}$ lbs.

No. 1 XN—3 Tier, $\frac{7}{6}$ in. wide, Board Rule. Has extra heavy brazed head (steel

caps and 2 in. brass shoulders).

Figured 36 inches with 6 in. handle. Full length $3\frac{1}{2}$ ft...Per dozen \$27 00 Wt. per dozen, 6 lbs.

No. 2 N —3 Tier, 1 in. wide. Has extra heavy brazed head (steel caps and 2 in. brass shoulders).
 Figured 30 inches, with 6 in. handle. Full length 3 ft.... Per dozen \$25 00 Wt. per dozen, 5½ lbs.

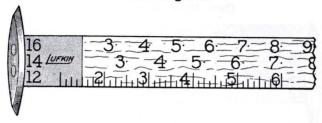
No. 2 XN-3 Tier, 7/8 in. wide. Has extra heavy brazed head (steel caps and 2 in. brass shoulders).

Figured 30 inches, with 6 in. handle. Full length 3 ft....Per dozen \$25 00 Wt. per dozen, 5 lbs.

No. 2½N-3 Tier, 1 in. wide, Sorting Rule. Has extra heavy brazed head (steel caps and 2 in. brass shoulders).

Figured 24 inches, with 6 in. handle. Full length 2½ ft. Per dozen \$24 00 Wt. per dozen, 5 lbs.

Burnt Figures



Note—All rules listed on this page except No. 50 are marked on one side to measure 12, 14 and 16 ft., opposite side 8, 10 and 18 ft., or 18, 20 and 22 ft.

In Ordering Always State Whether You Want Rules Marked 8 to 18, or 12 to 22 ft. For all Special Rules an Extra Price will be Charged.

No. 3—3 Tier, 1½ in. wide, Board Rule. Has extra heavy brazed head (steel caps and 1½ in. brass shoulders).
 Figured 30 inches, with 6 in. handle. Full length 3 ft.

Figured 30 inches, with 6 in. handle. Full length 3 ft......Per dozen \$23 00 Wt. per dozen, 6 lbs.



No. 6—3 Tier, 1½ in. wide, Board Rule. Has extra heavy brazed head (steel caps and 2 in. brass shoulders). With 6 in. brass plate, graduated in inches and 8ths, as illustrated above.

Figured 30 inches, with 6 in. handle. Full length 3 ft......Per dozen \$27 00 Wt. per dozen, $6\frac{3}{4}$ lbs.

With Socket Steel Square Head

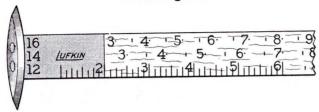
No. 4—3 Tier, 1½ in. wide, Board Rule. Patent socket steel head. A good, low-priced, serviceable rule.

Figured 30 inches, with 6 in. handle. Full length 3 ft......Per dozen \$21 00 Wt. per dozen, 6 lbs.

Export Rule

No. 50—1 Tier, 1 in. wide. Has extra heavy brazed head (steel caps and 2 in. brass shoulders). Marked both sides in inches and half inches only. Figured 30 inches, with 6 in. handle. Full length 3 ft......Per dozen \$25 00 Wt. per dozen 5½ lbs.

Burnt Figures



Half-Foot Marks

Some lumbermen prefer rules furnished with half-foot marks, i. e., aside from regular markings on rules the half feet are indicated by vertical dashes, the foot marks being indicated by dots. Rules with this style markings have been adopted as standard by the National Hardwood Lumber Association and the Hardwood Manufacturers' Association of the United States.

Note—Rules listed on this page are marked on one side to measure 8, 10, 18 ft., opposite side 12, 14, 16 ft., except No. 08, which is marked on one side to measure 9, 11, 13, 15 ft., opposite side 12, 10, 14, 16 ft.

No.	01	-3 Tier, 11/8 in. wide, Board Rule. Has extra heavy brazed head (steel caps and 2 in. brass	
		shoulders). Figured 36 inches, with 6 in. handle. Full length 3½ ft	\$29 00
		Wt. per dozen, 7½ lbs.	
No	02	-3 Tier, 1½ in. wide, Board Rule. Has extra heavy brazed head (steel caps and 2 in. brass	
110.	02	shoulders)	
		Figured 30 inches, with 6 in. handle. Full length 3 ft	\$27 00
		Wt per dozen 6 lbs	
37-	021	2-3 Tier, 11/8 in. wide, Sorting Rule. Has extra heavy brazed head (steel caps and 2 in.	
No.	027	2—3 I ler, 1/8 in. wide, Softing Rule. Has extra heavy brased head (see each and 2 in.	
		brass shoulders).	2 26 00
		Figured 24 inches, with 6 in. handle. Full length $2\frac{1}{2}$ ft	\$20 UU
		Wt. per dozen, 6 lbs.	
No.	03	-3 Tier, 11/8 in. wide, Board Rule. Has extra heavy brazed head (steel caps and 11/2 in.	
		brass shoulders)	
		Figured 30 inches, with 6 in. handle. Full length 3 ft	\$ 25 00
		We nor dozon 6 lbs	
No	0.0	-4 Tier, 11/8 in. wide, Board Rule. Has extra heavy brazed head (steel caps and 11/2 in.	
140.	UO	brass shoulders).	
		Figured 30 inches, with 6 in. handle. Full length 3 ft	\$27 00
		Marked one side to measure 9, 11, 13, 15 ft., opposite side 12, 10, 14, 16 ft.	
		Marked one side to measure 9, 11, 15, 15 ft., opposite side 12, 10, 14, 15 ft.	
		Wt. per dozen, 6¾ lbs.	

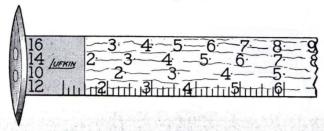


NARROW RULES

Half-Foot Marks

No. 01 N -3 Tier, 1 in. wide, Board Rule. Has extra heavy brazed head (steel caps and 2 in.		
brass shoulders). Figured 36 inches, with 6 in. handle. Full length 3½ ft	\$ 29	00
Wt. per dozen, $6\frac{1}{2}$ lbs. No. 02 N -3 Tier, 1 in. wide, Board Rule. Has extra heavy brazed head (steel caps and 2 in.		
brass shoulders). Figured 30 inches, with 6 in. handle. Full length 3 ft	\$27	00
Wt. per dozen, 5¼ lbs. No. 02 XN—3 Tier, ½ in. wide, Board Rule. Has extra heavy brazed head (steel caps and 2 in.		
brass shoulders). Figured 30 inches, with 6 in. handle. Full length 3 ft	\$27	00
Wt. per dozen, 5 lbs. No. 02½N-3 Tier, 1 in. wide, Sorting Rule. Has extra heavy brazed head (steel caps and 2 in.		
brass shoulders). Figured 24 inches, with 6 in. handle. Full length 2½ ft	\$ 26	00
Wt. per dozen, 5 lbs.		

Burnt Figures



No. 8 —4 Tier, $1\frac{1}{8}$ in. wide, Board Rule. Has extra heavy brazed head (steel caps and $1\frac{1}{2}$ in. brass shoulders).

Figured 30 inches, with 6 in. handle. Full length 3 ft.... Per dozen \$25 00 Wt. per dozen, 634 lbs.

Note—Marked one side 12, 14, 16, 18 ft., other side 8, 10, 20, 22 ft., also 12, 10, 14, 16 one side; 9, 11, 13, 15 other side, both right and left hand. In Ordering Always State Which of these Markings is Wanted.

No. 10 —5 Tier, 1½ in. wide, Board Rule. Has extra heavy brazed head (steel caps and 1½ in. brass shoulders).

Figured 30 inches, with 6 in. handle. Full length 3 ft.... Per dozen \$30 00 Marked one side to measure 12, 13, 14, 15, 16 ft., other side 7, 8, 9, 10, 11 ft.

Wt. per dozen, 6¾ lbs.

COMBINATION BOARD AND LOG RULES

No. 13 —4 Tier, 1½ in. wide. Has extra heavy brazed head (steel caps and 1½ in. brass shoulders).

Figured 30 inches, with 6 in. handle. Full length 3 ft....Per dozen \$28 00 Wt. per dozen, 6¾ lbs.

No. 13½—4 Tier, 1¼ in. wide. Has extra heavy brazed head (steel caps and 1½ in. brass shoulders).

Figured 36 inches, with 6 in. handle. Full length $3\frac{1}{2}$ ft... Per dozen \$30 00 Wt. per dozen, $7\frac{1}{2}$ lbs.

Above rules marked to measure 12, 10, 14, 16 ft. both sides, one side board measure, other side log scale. Our regular stock of these rules has Doyle Scale, but we will furnish them with any other scale if so ordered.

SQUARE HEAD BOARD RULES



The square head top or cap is of the best tempered steel, and is brazed on to an extra heavy brass shoulder. If so ordered this style head can be supplied on any of our Board Rules, in place of the regular oval head, except No. 4, which has a socket steel square head.

HICKORY LOG RULES

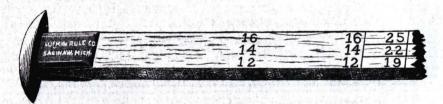
Burnt Figures

Made with any scale desired. Doyle, Scribner, Decimal and combined Doyle-Scribner scales are regular, all other scales are special. Regular rules are marked to scale even length logs from 8 to 20 or 12 to 24 ft. The list numbers refer only to length and style of rules. We are in a position to furnish special rules for any diameter or length measurements desired.

Note—In Ordering Log Rules Always State Log Scale Wanted and Whether 8 to 20 or 12 to 24 ft. Lengths are Wanted. For All Special Rules an Extra Price will be Charged.

Description and Prices

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14-	14	2.2
10-		10
	14	13
	14 -12	$egin{array}{cccccccccccccccccccccccccccccccccccc$

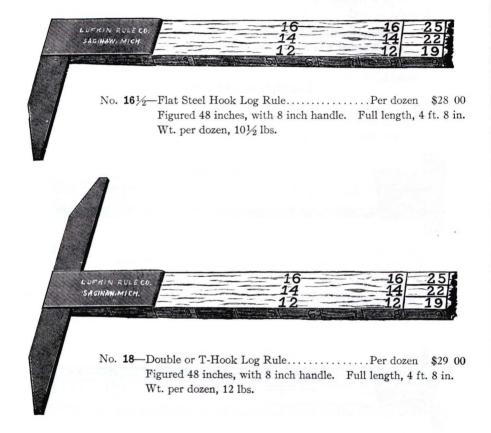


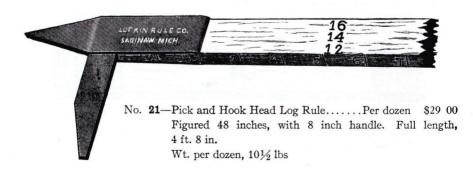


HICKORY LOG RULES

Burnt Figures

Note—In Ordering Log Rules Always State Log Scale Wanted and Whether 8 to 20 or 12 to 24 ft. Lengths are Wanted. For All Special Rules an Extra Price will be Charged.

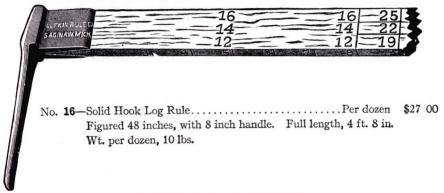




HICKORY LOG RULES

Burnt Figures

Note—In Ordering Log Rules Always State Log Scale Wanted and Whether 8 to 20 or 12 to 24 ft. Lengths are Wanted. For All Special Rules an Extra Price will be Charged.



SQUARE LOG RULES

= =	14		1/4	2/	4 2/3	3/3	4/4	5	15	6/5	8	15	Z
	16		1/8	2/8	3/2	4/2	5/5	6/7		7/9	9/7		1/2
	18	2	2	32	40	52	64	78	8	8	10	9 1	29
	20	ž	4	34	44	56	68	8 2	9	8	1 2	2 1	4

FLEXIBLE LOG RULES

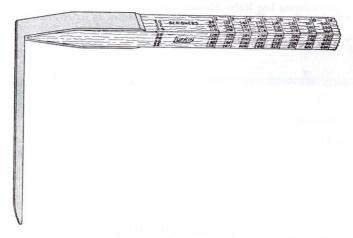


Made of second-growth white hickory, thin and flexible like a board rule, 4 tiers on each side, one side marked inches, and for 12, 14 and 16 ft. logs, other side 18, 20, 22 and 24 ft. logs. These lengths are standard and regular, and unless otherwise specified rules with these lengths will be shipped. Rules with lengths other than described above, but with not more than 8 tiers, will be supplied without extra charge, if so ordered.

	Wt. per doz. Pe	r doz.
No. 27—With plain brass head, figured	1 36 in., 6 in. handle 5½ lbs. \$ 42 " 6 " " 6 "	3 7 20
No. 28— " " " " "	42 " 6 " " 6 "	39 00
No. 20—With No. 1 board rule head "	$6 \ 36 \ 6 \ 6 \ \dots \ 6 \ 34 \ \dots$	40 20
No. 30— " " " " " " " "	42 " 6 " $7\frac{1}{2}$ "	42 00

PACIFIC COAST LOG RULES

For Large Timber; Especially Adapted for Pacific Coast Trade

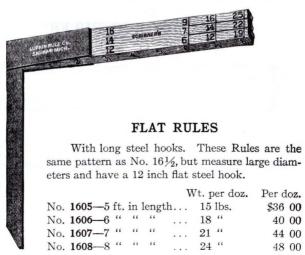


SQUARE RULES—PACIFIC COAST PATTERN

These rules are a pattern peculiar to Pacific Coast requirements. Seven-eighths inch square, and has 12 inch forged steel hook (Seattle Pattern Hook). Rule marked with Scribner scale for even length logs 20 to 48 feet inclusive.

With Seattle Pattern Hook

	Wt. per doz.	Per doz.				
No. 1705 —5 ft. in length. No. 1706 —6 " " "	. 23 lbs.	\$65 00				
No. 1706 —6 " " "	. 26 "	70 00				
Without Hook—(Plain Ends)						
	Wt. per doz.	Per doz.				
No. 1715—5 ft. in length No. 1716—6 " " "	. 12 lbs.	\$50 00				
No. 1716 —6 " " "	. 15 "	55 00				



DECIMAL LOG SCALE

The Decimal Scale is based on Scribner's. It drops the units and takes the nearest tens; thus Scribner's scale gives a log 12 inches in diameter, 16 feet long equals 79 feet. Decimal scale makes it 80 feet and is expressed with the figure 8 only.

Below 12 inches there are in use three different computations of the Decimal Scale, i. e., Decimal A, B and C. Printed copies of these scales will be sent on application. The Decimal C scale is the official standard of the United States Government Forestry Department

COMPARISON OF LOG TABLES

A printed table comparing the measurements of a 16 foot log, as given by the principal log scales used in different sections of the United States and Canada, showing wherein they differ, will be sent on application.

MARKING STICKS FOR LUMBER CRAYONS



A convenient article adapted to all regular lumber crayons, and made to hold them firmly in place. Nicely finished and nickel plated.

Wt. per doz. Per doz.

 Marking Sticks, complete with 36 in. handle.
 7½ lbs.
 \$20 00

 Crayon Holders Only, without handle.
 2½ "
 16 00

DIP RODS



For measuring the diameter of logs, especially when logs are lying in the water. Made of hard brass, $\frac{3}{16}$ x $\frac{3}{16}$ in., nicely finished and lacquered. With 1 in. hook. Wooden handle. Marked inches and half inches 1 to 32.

LOG CALIPERS

Measures the diameter and scales the number of feet, board measure, in log. Beam is made of maple with burnt figures. Jaws made of maple, brass tipped. Made with any log scale desired. Regularly figured to measure logs up to 48 inches in diameter.

Note—Calipers are regular when having not more than eight tiers of figures.

In Ordering Always State Scale Wanted and Lengths of Logs to be Measured.

No. 26-Steel Caliper. For measuring diameter of logs only.

Forged from finest quality steel and nicely nickel plated. Will caliper $\log 6$ to 36 inches in diameter.

Wt. each, 3½ lbs....

No.



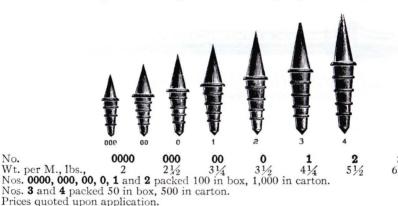
LUMBER GAUGES

For measuring thickness of lumber. Made of nicely finished aluminum, very light and convenient.

No. 00	Wt. per doz.	Per doz.
No. 0 —1, 1½, 1½, 1¾, 2 inches	9 oz.	\$6 00
No. 00 — $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, 1\frac{1}{4}, 1\frac{1}{2}, 1\frac{3}{4}, 2 inches	9 "	6 00
No. 000 — $\frac{5}{8}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, 2, $2\frac{1}{2}$ inches	12 "	6 50
Packed one in a box.		

BEADED BOOT CALKS

For log drivers. Forged from the best quality Crucible Steel.





Wt. per doz. Per doz. 11/4 lbs. Shoemaker's..... 5 Combined Sets and Punches..... 2

Sets and Combined Sets and Punches packed one dozen in a box. Shoemaker's Sets packed one-half dozen in a box.

ADVERTISING SPECIALTIES

Aids to an Increased Business



Measuring Tapes and Rules as Advertising Specialties

Quite apart from our regular stock goods, but of the same high quality, we make a complete line of Measuring Tapes and Rules for advertising purposes; that is, bearing advertising matter upon them and intended for use as a direct advertising medium.

These articles make most attractive advertising novelties; on some of them we can reproduce trade marks, etc. Their greatest appeal lies in their general usefulness. They are a neat and compact article, sell at a moderate price and carry the advertisement for years.

Many of these articles are suitable for general distribution, but the line embraces also a number of articles adapted to the needs of particular classes, and therefore making an especial appeal to them.

If you are thinking of using anything of this kind, or, if a dealer, and you think you could interest some of your customers, write for our proposition.

We have a Special 40 Page Catalog Devoted Entirely to this Branch of our Business.

If Interested Ask for Advertising Catalog Number Three.

THE METRIC SYSTEM

The Metric System of Weights and Measures was introduced into France in the year 1800 since which time it has been adopted by all of the leading countries of the world, with the exception of the United States and Canada and Great Britain. It is, however, permissable in the United States and is in actual use in many government departments and in a number of manufacturing establishments. It is also used in the United States dependencies of Porto Rico and the Philippines.

The Meter is the standard of length and when established was supposed to be one ten millionth of the Quadrant of the earth. It differs from this amount, however, by a small fraction.

The primary standard Meter is a platinum-iridium bar deposited at the International Bureau of Weights and Measures at Sevres, France. (Near Paris.)

Copies of this bar have been distributed to all of the leading governments, those for the United States being in the custody of the National Bureau of Standards at Washington, D. C.

The equivalent of the Meter in the United States was fixed by law in 1866 as 39.37 inches, and the length of the yard is derived from the Meter by this relation.

From the Standard Meter are derived all measures of length, surface, volume, capacity and weight of the Metric System. It being a decimal system all transactions of daily life using such measures are much simplified, and it would seem as if it should be universally adopted.

The following table will be found useful in comparing Metric and English Measures, viz:

Denomination	Meters	Inches	Feet	Yards	Miles
Millimeter	.001	.0394			
Centimeter	.01	.3937	********		
Decimeter	. 1	3.937	.328083	*****	
Meter	1.	39.37	3.28083	1.09361	
Dekameter	10.	393.7	32.80833	10.93611	
Hectometer	100.		328.08333	109.36111	
Kilometer	1000.		3280.83333	1093.61111	.62137
Myriameter	10000.				6.2137

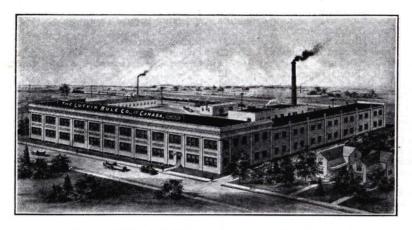
A KEY TO THE METRIC SYSTEM



The Decimeter Rule we herewith illustrate both sides of, has been widely distributed for educational purposes by the National Bureau of Standards at Washington and by The Decimal Association of London, England. It was termed by the late Lord Kelvin "A Key To The Metric System." It is of steel accurately ground to size and is one Decimeter long, one Centimeter wide, one Millimeter thick. It is divided on one edge in Centimeters and Millimeters and is also marked with other interesting facts pertaining to the Metric System. It is an article of interest and value to those wishing visual demonstrations of Metric sizes. Mailed to any address for 25 cents.

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Factory of The Lufkin Rule Company of Canada, Ltd. Windsor, Ontario

This catalog was reprinted from an original in the collection of Lee Sell, a Mid-West Tool Collectors Association Member.

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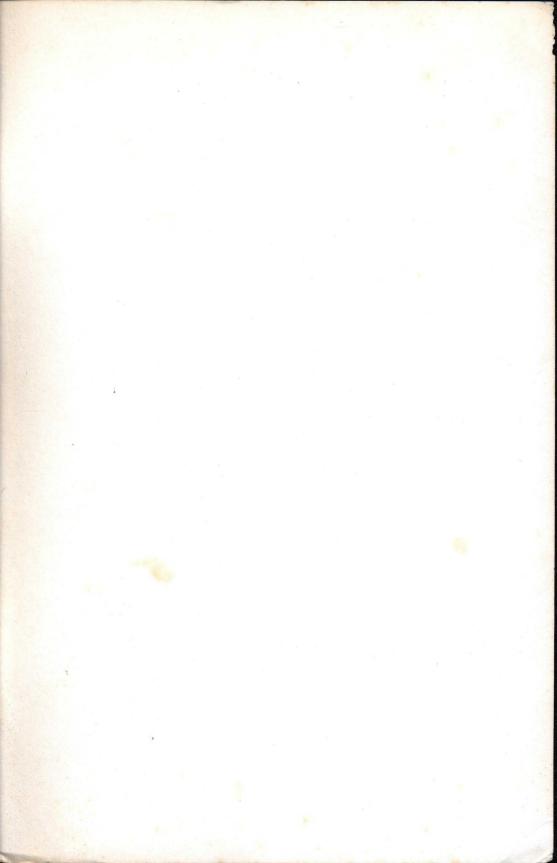
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September, 2005

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